

American Aviation

The Independent Voice of American Aeronautics

SEPTEMBER 1, 1945

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Prestige and Rank

PRESIDENT TRUMAN'S reorganization of the Department of State has done much to strengthen the department.

But the government's handling of aviation in this key department still lacks the measure of prestige and rank which it needs, and which is accorded to air matters in other countries.

We still do not have an Assistant Secretary of State, yet there are few things of greater concern to the United States than its international air commerce.

The CAB has granted certificates for airline services through Europe and beyond, and the Army's fine Air Transport Command will shortly be moving out of many of its foreign operations. It is high time that we had a governmental setup on a par with the importance of the problems of international negotiations which face us.

If one wishes to discuss aviation in Great Britain, one goes either to the Secretary of State for Air, or to the Minister of Civil Aviation. Both are high ranking positions on a par with the importance of aviation to England. In France the Minister of Air is one of the government's key posts.

But in the United States if one wishes to discuss aviation on a diplomatic level, he may go first to the Secretary of State, who passes the matter on to the Under-Secretary of State, who in turn will doubtless pass the inquirer on to the head of the transportation and communications division, and finally the inquirer winds up in what amounts to a subsection on civil aviation and not even in the main building of the Department.

This lack of stature for aviation in international matters may well cost us severely in the future. We developed world air transport into something colossal during the war. But our chips in the peacetime era are not many. We've built the airports and paved the runways and built the transport planes and when the Army pulls out its services we're going to have to start out with few rights and privileges.

We haven't even obtained landing rights in Great Britain, France and Russia, to name only a few. Yet our three commercial services across the Atlantic—TWA, American Airlines System and Pan American—are ready to begin preliminary flights over the extended routes.

(Turn to page 6)



President of PICAQ Council

Dr. Edward P. Warner, vice chairman of the U. S. Civil Aeronautics Board, was elected president of the Interim Council of the Provisional International Civil Aviation Organization (PICAQ) at its first meeting in Montreal. (Story on page 22)

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TWA Net for First Half of '45 Hits Peak

Gross Revenues, \$17,218,608; Income, \$1,699,16377

25c



of course we'll
"KEEP 'EM FLYING"

Air Power has clearly demonstrated its vital role in helping to terminate the greatest struggle that man has waged against man. * *

So, too, Air Power is Peace Power, for by the lessons learned through war's testing needs, there have accrued such accelerated developments of safety, comfort, and efficiency, that this mighty power is further strengthened to guard the rights of all. * *

Years of experience in creating the famous P-47 Thunderbolts to exacting specifications of the Army Air Forces, and engineering and development work in the constantly broadening channels of aircraft construction, have developed a highly skilled group of scientifically trained workers here at Republic. We will continue to build planes needed to police and maintain world peace, and in addition, shall apply the energies of our seasoned personnel to the building of a line of aircraft for the peace time markets. Republic Aviation Corporation, Farmingdale, L. I.

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The Goodyear Controlled Canopy eliminates undesirable bulges — thus reducing drag to

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Goodyear is building components for sixteen different Army-Navy types of aircraft, including complete Corsair fighters and airships.

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American Aviation

Volume 9, Number 7 • The Independent Voice of American Aeronautics

September 1, 1945



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American Aviation Daily: The only daily news service for the aviation industry. Published daily except Sundays and holidays since 1939. Dispatched via airmail or surface mail for overnight delivery in the United States. Subscriptions: \$15 one month, \$170 one year. Airmail delivery to points outside the United States at additional cost to cover postage. Service Bureau available to all subscribers. CLIFFORD GUEST, Managing Editor.

International Aviation: A weekly newsletter of aviation trends and news in foreign countries. Published on Friday of each week and dispatched via first-class surface mail. Editorial representatives in foreign capitals. Subscriptions: \$100 one year (12 issues). Airmail delivery available at additional cost to cover postage. Service Bureau available to all subscribers. FRANK M. HOLZ, Managing Editor.

American Aviation Directory: Published twice a year, Spring and Fall. Complete reference data on administrative and operating personnel of airlines, aircraft and engine manufacturers, accessory and equipment manufacturers, organizations, schools, U. S. and foreign aviation groups and departments, etc. Completely cross-indexed by companies, activities, products and individuals. Single copy \$5.00; annual subscription (two successive editions) \$7.50. Spring-Summer 1945 issue now available. HELEN L. WALSH, Managing Editor.

American Aviation Traffic Guide: Monthly publication of airline schedules, rates and regulations for passenger and cargo transportation by commercial air transport. Supplements furnished subscribers covering changes occurring between issues. Subscriptions U. S. and Latin America \$5.00 one year (12 issues and supplements); Canada \$5.50. All other countries \$6.50. Published and revised from editorial offices at 137 North Clark Street, Chicago 2, Illinois. (Telephone: State 2154). H. D. WHITNEY, Managing Editor.

American Aviation Reports: Current financial and traffic statistics on all domestic airlines as reported to the Civil Aeronautics Board. Includes monthly and semi-annual summaries. Yearly subscription comprises over 500 separate reports. \$175 one year; \$100 six months; \$20 one month. Special statistical and research work for subscribers at cost.

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(Continued from page 1)

How slow this country has been to recognize aviation within the government! We've had assistant secretaries for air in the War and Navy departments in recent years, but military aviation long ago deserved an independent cabinet post. We finally obtained an assistant secretary for air in the Department of Commerce, but aviation is only one of many functions of this department.

We understand that the President was cognizant of the need for more skilled and specialized handling of aviation matters in the Department of State when he launched his reorganization. But more skillful handling within the department is only one problem. What is needed is prestige and rank—cabinet rank. We need an Assistant Secretary of State for Air.

International aviation is a No. 1 problem and a No. 1 opportunity for this country. Our foreign air policy is now firmly established. If the policy isn't followed up with recognition and prestige in the government itself, we may well take a beating commercially after the war and after the Army pulls out of the airport, communications and transport system which it has operated abroad.

Important Milestone

TWENTY-FIVE YEARS ago on September 8 the first transcontinental air mail was flown on what subsequently became United Air Lines' AM 1, from New York to San Francisco. The first flight, flown by four pilots in relays, required eighty-two and two-thirds hours, a far cry from today's fast and efficient world-wide air transport services. It is interesting to note that of the four pilots, only one is living today, James P. Murray, vice president of Boeing Aircraft Company with offices in Washington. Jimmy Murray, who used to study his school books while flying the open-cockpit mail planes in the west, is still playing an important role in aviation with many years of usefulness yet to come. A 25th anniversary isn't too important in many lines of endeavor, but for aviation a silver birthday represents a tremendous amount of history-making progress.

Retain the Plan

THE Civil Aeronautics Board is currently investigating the entire Air Travel Plan which has been such an excellent feature of air transportation in this country ever since idea-minded Charlie Rheinstrom of American Airlines sponsored the plan many years ago. Still known by its old name of "scrip," the most admirable feature of the plan today is the credit facility.

We hope the CAB will not destroy a public utility, for that is what the Air Travel Plan is today. When one purchases a railroad ticket, he usually does so with planning and leisure. Often the amount is not great. But people who travel by air often go long distances and most travelers don't carry large sums of cash with them.

The CAB must recognize that air transportation is different. For ourself, we have hopped on a plane

for Los Angeles with only a ten spot in our pocket, entirely relieved of the concern about money for transportation. It is a genuine business aid, and a public convenience, to be able to buy transportation on credit. It is not discriminatory any more than is the purchasing facility of any corporation "discriminatory" over the individual. Air transportation is increasing the tempo of business and communications. The means with which air transportation may be purchased must keep pace with the concept of the aircraft itself. Eliminate the discount if necessary, but don't discard the credit feature. This is the plea of all air transport users. It is a large and growing segment of the public that is speaking thusly.

A Splendid Record

IT WAS with regret that we learned of the resignation as chairman of the Tennessee Bureau of Aeronautics of Percy McDonald, the able, affable and forward-looking Tennessean who has been such a familiar and constructive figure in aviation in the United States. The aviation accomplishments of Percy McDonald have been many. Tennessee has been far ahead of other states in education, state-wide planning and national representation in matters pertaining to that state. There are a great many in aviation who are going to miss his presence, but if we know Percy, he will remain active in numerous ways. We hope so.

The AWPC Idea Worked

AS THE national and regional aircraft war production councils prepare to close up shop, the aircraft manufacturers can feel that they operated during the war perhaps the smoothest-working and most efficient industry-wide war agency that any industry has ever experienced.

Not only was it a history-making example of what a single industry can do to coordinate its efforts but it was the first time in the history of the aircraft manufacturing industry that such cooperation and such efficient coordination has been possible. It is not in the cards that the AWPC formula will work in peacetime, but there are many areas of cooperation which might well be continued for the betterment of the industry as a whole.

Without question the AWPC—national and regional—proved to be bottleneck breakers and red tape unwinders, both at the top administrative and the plant and operations levels. It was the ability of AWPC to represent directly to government and departments and officers the prompt views of the 16 member companies, and to get the government views back to the companies virtually overnight, that was the big factor in the success of the AWPC idea. Problems ranged from child care welfare to high production policy, and it is to the everlasting credit of the presidents of the companies that they, personally and earnestly, participated regularly in AWPC meetings.

Credit must first go to the company executives who set out with great sincerity to cooperate and coordinate

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ELECTRIFYING the Road to Tokyo

Curtiss Electric Propellers now add to the demonstrated effectiveness of the Boeing B-29 Superfortress:

Greater striking force—made possible by propeller weight reduction.

Shortened landing runs—through aerodynamic braking.

Automatically synchronized propeller speeds.


The unmatched durability of hollow steel blades.

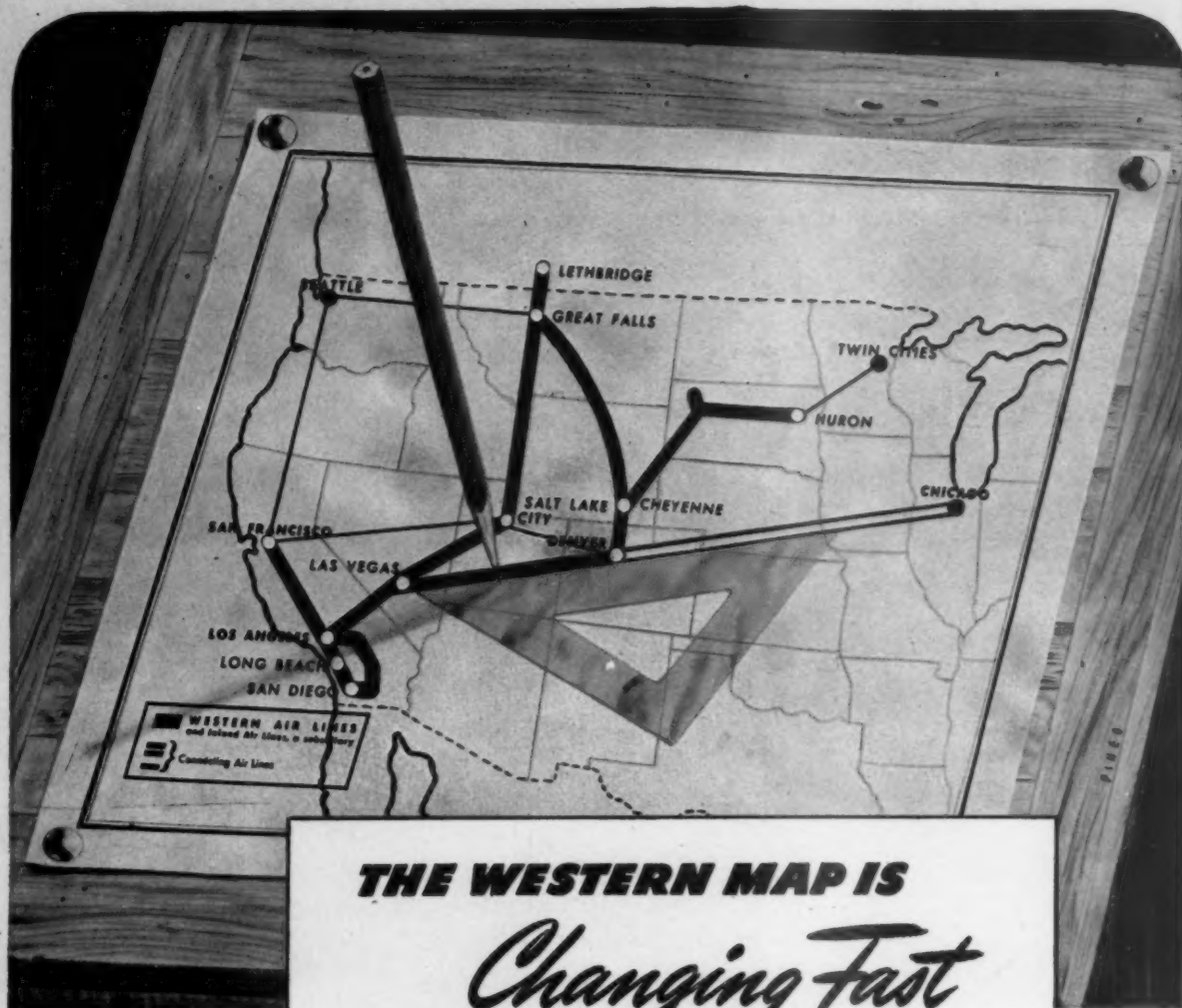
The additional safety of electrical propeller control, unaffected by temperature and altitude and with minimum vulnerability to combat damage.

These new advantages for the Superfortresses on the road to Tokyo mean new destruction for the enemy and increased security for B-29 crews.

CURTISS

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Changing Fast

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Sweeping changes in air transportation have kept pace. As typified by Western Air Lines, air transportation has foreshortened the great distances, speeded communications. Today, Western Air is all-out to finish off the Jap. Tomorrow, through route extensions and new lines applied for, Western Air will help complete the transformation of the West.

General traffic office: 510 W. Sixth Street, Los Angeles 14



WESTERN AIR LINES

AMERICA'S PIONEER AIRLINE

for the war effort. To John Lee, the first manager of the west coast council and in a sense the father of the idea, must go considerable credit. In the latter stages Richard Palmer, as manager of the national AWPC; Clyde Vandenberg of the East Coast council, and Bill Peters of the West Coast council, must take the bows. And the affiliated Central Aircraft council, Harry Conrad, manager, played its role also in coordinating its efforts with the 16 primary manufacturers. AWPC made industrial history, just as the aircraft industry established unprecedented production records.

Passenger Service Idea

HERE is an idea which we respectfully pass on to the airlines at no charge whatever, not even for an extra olive or an extra sprig of parsley on our sky luncheon salad.

Why wouldn't it be (you see, we are already backing into this idea) an additional welcome service to airline passengers to maintain at each major terminal brief weather information and temperature reports for destinations on the system and to have such information available for passengers telephoning for reservations or confirmation?

For example Mr. B. O. Plenty, who recently came into some dough in the Dick Tracy serial, might call up at 2 p.m. in Washington for space to Denver on the 5 p.m. flight. (This is strictly postwar, otherwise it's just a dream.) The reservations girl replies pleasantly (again this is strictly postwar) that she can confirm space (what a dream!) and then adds, "and the temperature in Denver at 12 noon was 42 (Denver

won't like this) and the forecast is continued cold." (Well we aren't going to Denver very soon anyway.)

You've been in hotels in the good old prewar days when the telephone operator remembered to wake you in the morning to give you the time and also gave you the temperature and the general weather condition. The airlines might well adopt the same idea.

It isn't just an additional courtesy service. Often the information is highly useful. It may be hot as blazes in one city and unexpectedly chilly at the destination. One usually wants to wear clothes for the destination, not at the point of departure.

A further illustration is military travel. In the U. S. the army specifies summer uniforms during the summer months. But in England and the Continent, winter uniforms are specified in the summer. Thus if a military man departs from Washington or New York for the U. K., he invariably dresses for Europe and not for the point of departure.

It may be too much to add a temperature and weather report service today, what with the multitude of problems faced by the airlines, but it is a good idea for the future, we think. Anyway, it's suggested for free and it isn't often we have such bargain counter offers these days.

Delta's Crack Slogan

The cleverest advertising slogan we've seen in many a moon is the one being used currently in Delta Air Lines advertising: "Delta is the Shortest Line Between 19 Points." A triple orchid to the originator.

WAYNE W. PARRISH.

Criticizes Article

(In its July 1 issue, AMERICAN AVIATION published an article entitled, "War Changes South American Commercial Aviation Profoundly" (P. 28). The following letter is a criticism of the article. The letter was contributed by an official known to AMERICAN AVIATION, but who must remain anonymous because of his official position).

To the Editor:

1. So far as I am aware, Air France never held any monopoly in South America, except in Venezuela—a line which the Venezuelan Government took over in 1935.

2. The reference to Scadta is incorrect, to say the least. So far as is known, no difference existed between Lufthansa and Von Bauer. The latter, so far as I am aware, is still on the programmed list. Pan American owned Scadta since 1931, but the Germans operated it until we undertook our de-Germanization program and put on plenty of heat to have the Heinies thrown out.

3. The writer does not appear to distinguish between P.A.A. international operations and its local subsidiaries. Only in a few instances has the international operator engaged in cabotage. These are Venezuela, Argentina and Peru. In the other countries, namely, Mexico, Cuba, Colombia, Ecuador, Bolivia, and Brazil, local subsidiaries carry the domestic traffic.

4. Aeroposta Argentina was, to all intents and purposes, a German subsidiary because of the fact that it bought the JU 52's on the installment basis, and in that manner the Germans secured an operational control over the company.

5. The trouble with Air France was that the French lacked any coordinated long-range policy with regard to aviation. Funds and organization were only secondary items.

6. I know of no instance where the unrestricted granting of concessions to foreign operators took place. Unfortunately, the article has too many sweeping generalizations in it.

7. It is true that the military air forces have taken over a number of operations. How-



ever, it should be pointed out that in Brazil the military operate an air mail service only. In Peru and Colombia the military services operate along the border regions, where they carry commercial traffic whenever space is available over and above military requirements. Chile's air line has always been operated by the military while in Argentina that tendency has been growing, so that all operations there are now under the military except those of Aeroposta.

8. Again he makes no reference to our de-Germanization program, by means of which Latin air lines were able to secure financial and technical assistance to help them eliminate the Axis influence.

In this whole connection he fails to point out that what is considered a "domestic company" differs from country to country. For example, in Brazil a company is considered Brazilian if it is owned 33% by Brazil's nationals. In Colombia and Venezuela 51% is required.

I know of only two instances where military operations have become international. The Brazilians have just begun a military air mail service to Bolivia, having had one in operation to French Guiana for sometime. Argentina operates a service into Paraguay.

However, I could go on for the rest of the article but I don't think it is necessary. It is evident that the writer is only familiar with the southern portion of the continent and not the over-all picture. He should, however, be more careful in his statements since they will appear in AMERICAN AVIATION, which is considered authoritative and which has always set very high standards. I, myself, have always looked on it as the aviation bible, especially when read in conjunction with the Daily.

Wants to Help

To the Editor:

Congratulations and heartiest approval of your "National Air Center" idea. Let me know how we can help.

CLAUDE PULLEN,
Miami, Florida

ATC, NATS to Continue?

To the Editor:

Now is the time for the airlines of the United States to clamp down on the operations of the Army Air Transport Command and the Naval Air Transport Service. If they don't do it now, later will be too late.

All personnel of the Naval Air Transport Service have received notice that there will be no releases at this time under the new point system which has been set up since V-J Day because there are no replacements at this time. Until replacements can be had no further discharges can be given.

As an old airline pilot, this to me can mean but one thing and that is that the Naval Air Transport Service and the Army Air Transport Command plan on continued operation for quite some time to come. As these services operate at the present time on a commercial basis, this continued operation can mean but one thing, another airline and this one run by the government, in competition with the regular airlines of the United States.

They, the armed forces, cannot use the excuse that they have no replacements at this time, as we are supposed to be disbanding the Army and Navy forces, not building them up. Then on the other hand, they do have plenty of replacements if they will just look over their personnel files. I myself am just a Seaman 2/c and even though I have over 12 years of flying, 5000 hours and hold an airline transport pilots license, they can only see fit to put me at a desk with a pencil in my hand. The reason for this, they tell me, is because they have too many pilots at the present time. Therefore, I say that something

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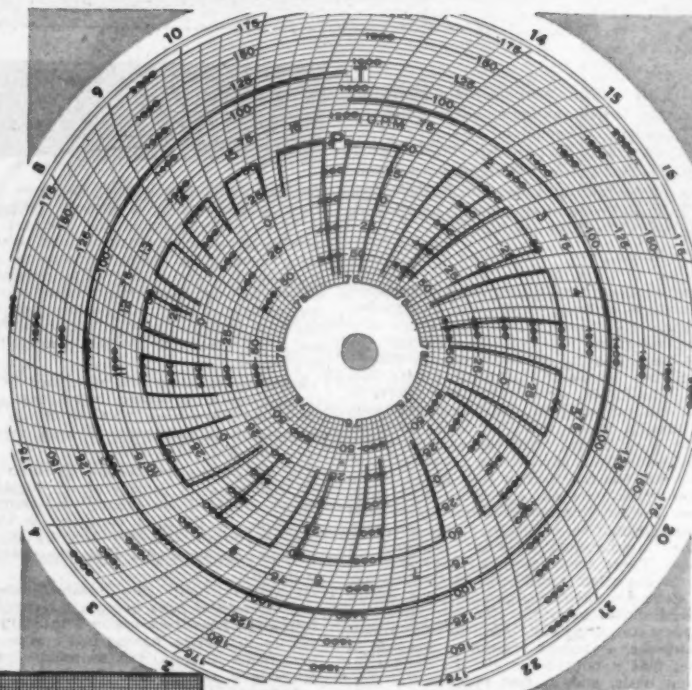
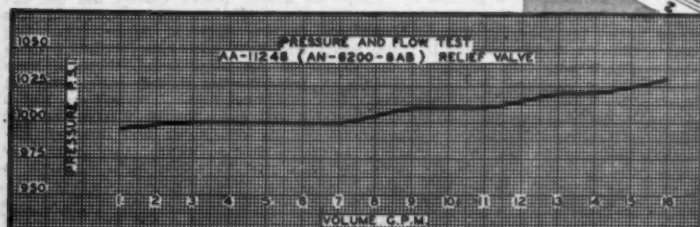


Chart showing automatically recorded results of pressure and flow test made upon Vickers Relief Valve having setting of 1000 psi at its normal rated capacity of 6 gpm. Time is in minutes. Code: "T" is temperature and "P" is pressure.

Data recorded on chart above plotted on rectangular coordinates to permit more easy evaluation. Note that pressure varies only from 995 to 1030 psi when flow rate is increased from 1 to 16 gpm.



should be done or the airlines will have another airline to compete with and this time they will be competing with the U. S. Government, which isn't good.

I only hope that some Congressman reads this and sees fit to do something about it, not only for the airlines but for the boys who want to get home.

(NAME WITHHELD BY REQUEST)

Editor's Note: Ample assurances have been given by top military officers that ATC and NATS will give way to civil lines as soon as the latter are prepared to take over, and as soon as military needs are completed. Judging from number of uniformed men still overseas, both ATC and NATS have big jobs still to perform. Civil Airlines are not yet ready. There is no cause at this time for concern, nor should there be for the future.

'Discouraging Article'

To the Editor:

As one of the 300 traffic and flight control officers that Barbara McNamee mentions in quoting a recent Department of Labor report, I am quite surprised that *AMERICAN AVIATION* would print such a discouraging article as appears on page 20 of the August 15 issue. The depressing ratios quoted of men eligible for jobs in aviation to the estimated number of available jobs in that business may indeed be true. But why stress this one fact so much? Every eligible service man is not going into aviation, and for those who do plan to, I believe that the opportunities for the placement of deserving personnel should be stressed, if only in the interest of the industry itself.

I for one, as a young officer looking forward to an aviation career, refuse to be discouraged by an article which, in contrast to the general tone of your fine magazine, appears to present only one side of an important consideration. I hope that all my aviation minded colleagues now in uniform will hold a similar viewpoint.

JOHN W. NICOL,
Captain, Air Corps,
Office of Flying Safety,
Winston-Salem, N. C.

Editor's Note: We, too, hope the Department of Labor is unduly pessimistic. In any event, this is no time to be discouraged. There are opportunities aplenty.

THE BOOK OF MILES AIRCRAFT. Compiled by A. H. Lukins and edited by D. A. Russell. 88 pp. Harborough Publishing Co., Leicester, England.

This is an illustrated log of Miles aircraft from the Martlet advanced trainer of the late 1920's to 1942's Libellula, the two-seat tandem-wing research craft. Another in the growing set of volumes on British aircraft manufacturers, this book contains scale plans and specifications on the projects of Miles Aircraft, Ltd.

PRIVATE PILOT EXAMINATION. By Charles A. Zweng. 34 pp. Pan American Navigation Service, North Hollywood, Calif. \$1.00.

This is a brush-up manual to prepare private pilots for the new written examination. The new Civil Air Regulations are thoroughly covered in question and answer form, the material comprising Part 60—Air Traffic Rules—and Part 43—General Operation Rules. The appendix contains flight maneuvers required of the private pilot under the new regulations.

WOMEN IN AVIATION. By Betty Peckham. 164 pp. Thomas Nelson & Sons, Edinburgh-New York-Toronto.

An overall glimpse of women in aviation today is given by Mrs. Peckham in a book aimed to be an accurate vocational guide of the outstanding work that the aviation field offers women.

Wings of Yesterday

Twenty-Five Years Ago

The British Air Ministry held the second competition for seaplanes and amphibians. (Sept. 1, 1920).

A Curtiss N-9 seaplane flew over the Sierra Mountains, a distance of 120 miles over a route from Sacramento to Lake Tahoe, Calif. (Sept. 2, 1920).

A Martin bombing plane, carrying a crew of four men and a torpedo weighing 1000 lbs., flew from Washington to Yorktown. The distance of 125 miles was flown in sixty-four minutes. (Sept. 3, 1920).

Successful experiments were made by two Army planes making a landing by using a variable pitch propeller. The plane stopped 75 ft. from the point where the landing gear first touched ground. (Sept. 5, 1920).

Fish and Game Commissioner A. L. Monahan succeeded in locating schools of fish, from a dirigible, near San Diego, Calif. (Sept. 7, 1920).

A two-day conference of the Federation Aeronautique Internationale was held at Geneva. (Sept. 8-10, 1920).

Transcontinental Air Mail Service was inaugurated over a route from New York to San Francisco, Calif. (Sept. 8, 1920).

A survey of Southern Lake Michigan was completed by the Great Lakes Navy Station. (Sept. 10, 1920).

Three Dirigibles of the U. S. Army Air Service flew for 2 hours in formation at Langley Field, Va. Radio communication directed them in the maneuvers. (Sept. 11, 1920).

Fifteen Years Ago

Capt. Dieudonne Coste and Maurice Bellonte completed the first non-stop flight from Paris to New York. They covered the 4030 miles in 37 hours, 18 minutes and 30 seconds, flying a Breguet 19, Hispana Suiza motored. (Sept. 1-2, 1930).

The Fifth International Air Congress met at The Hague, Holland. (Sept. 1-6, 1930).

The Gordon Bennett Balloon Race was won by W. T. Van Orman, in a Good-year VIII. Van Orman flew 542 miles, from Cleveland, Ohio to Norfolk County, Mass. (Sept. 2, 1930).

Maryse Bastie established a duration record for women, of 37 hours, 55 minutes, 43 seconds, at Le

Bourget, France. The plane flown was a Klemm, Salmson motored. (Sept. 2-4).

The American Legion held an Air Meet at Philadelphia, Pa. (Sept. 6-7).

H. L. Russell, flying a Ford, Wright and Pratt & Whitney motored, won the annual National Air Tour. (Sept. 11-27).

(Many of these booklets may be obtained from American Aviation Book and Periodical Dept., American Bldg., Washington 4, D. C.)

Sperry Gyroscope Co., Brooklyn 1, N. Y., has just published a case bound "Klystron Technical Manual." The 94-page manual is concerned primarily with the underlying principles of velocity modulation tubes rather than their application. It is not for the lay reader. Also just issued by Sperry is a 40-page illustrated catalog covering the "M.I.T.—Sperry Detonation Indicator" and its applications.

"Your Propellers at War" is the title of a 36-page illustrated booklet just released by Hamilton Standard Propellers Division, United Aircraft Corp., East Hartford, Conn. It contains pictures and descriptions of the various warplanes using Hamilton props.

A new condensed catalog of precision machine tools, small tools and gages has just been released by Pratt & Whitney Division, Niles-Bement-Fond Co., West Hartford 1, Conn. It contains 72 pages of condensed information, illustrations and specifications.

"How Can We Do It Better?" is the title of the latest of a series of booklets issued by the Department of Public Relations, Railway Express Agency, New York 17, N. Y.

A 46-page illustrated booklet covering its developments in petroleum refining and petroleum chemistry has been published by Socony-Vacuum Oil Co., New York, N. Y., under the title "948 Men and You." Copies are available on request.

"Electrical Power Systems for Aircraft—A Report to the Air Transport Association on Future Systems" has just been issued in booklet form by Aeronautical Radio, Inc., Washington, D. C. It includes an analysis of the electrical system in aircraft and recommendations for future standardization.

"How to do Business with RFC" is a booklet just published by Reconstruction Finance Corp. containing information on how and where to buy surplus aircraft, industrial plants, producers and capital goods. The booklet lists 3000 types of surplus items which will be disposed of by RFC, and the RFC sales centers, and directs buyers who wish to be placed on mailing lists for advance notice of sales or who wish to place advance orders for surplus items. The booklet may be obtained from the Reconstruction Finance Corporation, Washington, D. C. or local RFC Agencies.

The Treasury Department's Commissioner of Internal Revenue has issued Mimeograph No. 5897 on "Treatment of Compensation for Termination of War Contracts. Deductions upon Termination and No-Cost Settlements," supplementing and restating the instructions given in Mimeograph 5766 issued November 1, 1944. The new mimeograph prescribes rules "for the treatment of compensation for the termination of all war contracts in all cases where the contractor renders his returns other than on a basis of cash receipts and disbursements."

"Prospects and Problems in Aviation" a review of the history of air transport and aircraft manufacturing as well as study of the postwar problems of aviation has been published by the Chicago Association of Commerce. The book consists of 12 papers given at the recent Chicago Forum on Aviation and two supplementary articles.

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Trend of

(As compiled and edited by Clifford Guest,

Two Billion Due Manufacturers: Out of the welter of VJ-Day cancellation figures, enough facts began to emerge last week to indicate that aircraft manufacturers will have valid claims of about \$2,000,000,000 to be collected from the Government—out of a total of about \$19,615,000,000 in aircraft contracts awaiting settlement. In other words, when the final cancellations came, about 17 billion dollars in orders were on the books on which no parts or labor had been expended. Here is the way the figures looked last week:

Navy Bureau of Aeronautics contracts awaiting settlement at end of July: fixed price, \$220,000,000; cost plus, \$395,000,000. Estimated cancellations in August, \$3,500,000,000. Total Navy contracts awaiting settlement, \$4,115,000,000.

Army Air Forces contracts awaiting settlement at end of July: fixed price, \$2,900,000,000; cost plus, \$3,600,000,000. Estimated August cancellations, \$9,000,000,000. Total AAF contracts awaiting settlement, \$15,500,000,000.

CAB's Discretionary Powers: Language of the Civil Aeronautics Board's decision in rejecting petitions for re-opening of the North Atlantic Route Case seemed intended to fortify the Board in the exercise of its quasi-judicial powers and lay the groundwork to avoid possible future appeals to the courts from CAB decisions—thus strengthening its semi-autonomy.

The Board's order denying the North Atlantic petitions for reargument (strongest of which was filed by Pan American) made no mention of the fact that the decision had been approved by President Truman before CAB issued it, and that his discretionary powers may possibly have shaped the final decision. Twice in the order CAB referred to the exercise of discretionary powers granted it by law, and pointed out that the objections of the dissatisfied parties in the case were directed chiefly to matters of discretion rather than to errors of law.

Should attempts be made to have the decision reviewed by a Federal Court, errors of law or procedure probably would have to be shown to the court, which on purely discretionary matters would most likely be unwilling to substitute its judgment for that of the authoritative U. S. agency in aviation.

War Industrial College Proposed: The Army and Navy have in mind the establishment of an Army-Navy War Industrial College. Its purpose would be to school military procurement personnel and industrial war production personnel in the problems of procurement for war. It would operate on a permanent basis, much as does the Army War College now in the realm of the purely military phases of war.

The College would develop an over-all country-wide scheme through which trained personnel could put industry into production, for example, on the latest type of combat aircraft within three months—instead of two years as was the case after Pearl Harbor. The proposal has strong backing, probably will be brought out for discussion before long.

Forrestal Will Resign: Probably the next cabinet member to submit his resignation will be Secretary of the Navy Forrestal. In informed quarters it is believed his resignation will be on the President's desk any day now. It appears almost certain that he will be succeeded by John L. Sullivan of Manchester, N. H., who became assistant secretary of the Navy for Air early in June. The industry does not feel that Sullivan has a strong aviation background.

The Industry and NACA: The National Advisory Committee for Aeronautics—which will continue to be the hub, government-wise, of aviation research—has been working on the formation of an Industry Consulting Committee which will include several top figures in transport and manufacturing. NACA wants the views of practical operating men as well as scientists.

The News

Managing Editor, American Aviation Daily)

Selling an Airline Franchise: For the first time the Civil Aeronautics Board has before it a proposal by an airline to sell a portion of a certificated route with only the franchise itself, and no hard assets, involved. This is the case in which Transcontinental & Western Air seeks permission to sell its route from Las Vegas, Nev., to Phoenix, to a newly organized firm known as Arizona Airways. It presents a brand new policy problem for the CAB.

Heretofore, CAB has fixed no value on certificates in rate making cases. Previous mergers and sales also have always involved equipment and other assets. There is no precedent for the TWA-Arizona case and whatever action CAB takes probably will establish important policy.

Criticisms of CAA: The CAA's aircraft registration section is becoming a target for complaints by operators who report the delay in change of ownership transactions currently averages four to six weeks when it should not have to exceed one week. Also cause for grumbling is the attitude of the Administration's engineers who "pick out petty faults" in marketable craft and issue numerous bulletins calling for "unnecessarily high qualifications" resulting in a situation where (1) Operators find themselves with stocks of surplus planes of little sales value and (2) prospective purchaser finds necessary conversions prohibitive in cost.

Administrator Ted Wright is getting wide praise for his crack-down on field personnel accused of fraudulent practices. Wright intends to see his investigation through to the limit. Things are looking up in the CAA!

Navy's Peacetime Plans: Some hint as to the size of the postwar Navy and its potential aircraft needs came to light with the recent estimate by Secretary Forrestal that the future Navy may consist of about 400 warships and 8,000 aircraft in active commission. He recommended that the 21,000 planes and 800 ships comprising the rest of the fleet be held in reserve for ready use, but not manned. Those planes, of course, will soon be obsolete.

West Coast reports indicate that the Navy is quietly starting a program to promote greater use of lighter-than-air craft for both tactical and transport purposes. One Naval air station on the Coast has been doing a selling job in this respect to Chamber of commerce and American Legion representatives.

The Navy has officially fixed its postwar pilot training program at 4,300 Navy and Marine aviators a year—expects to take in about 500 candidates a month. Since Pearl Harbor the Navy trained nearly 60,000 pilots and 40,000 aircrewmembers, with only 855 fatalities from accidents.

Aviation Observations: Illinois Central Railroad plans to start using in September a new aluminum refrigerator car which it claims is the answer to the challenge of American Airlines and others in the handling of freight plane loads of fresh fruits and vegetables. . . . The California Nurserymen's Association has a committee working with the airlines on plans for shipment of potted plants in bloom, nursery stock, etc., which would give eastern shops the benefit of products from California's long growing season. . . . In the present fluid state of national developments predictions with any time element are not safe, but the award of Caribbean air routes by the CAB is expected momentarily. . . . The AAF definitely will retain Wright Field, Dayton, O., and Elgin Field, Fla., as the Army's major research and development centers. . . . BOAC will soon take over the Pacific Wing of the Royal Air Force Transport Commands, giving that carrier a round-the-world service. . . . Hope for the "little" airlines was seen last fortnight in a record setting award by CAB when the Board gave Delta Air Corp. 1,002 miles of new routes—the longest domestic route authorized since passage of the Civil Aeronautics Act. . . . Lightplane manufacturers aren't having much trouble getting materials. An example is Aeronca which expects to turn out its first postwar plane Sept. 5 and have 550 completed by the end of the year.



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This Issue

Aircraft Manufacturers Now 'On Their Own'

No Company Escapes Impact of Cancellations, But
Experimental Contracts Are Virtually Untouched

THE U. S. aircraft industry, expanded by war into the nation's largest manufacturing business, today faces the period where it must stand on its own feet without the huge wartime contracts which ballooned unfilled orders into astronomical figures.

Since the fighting stopped, fourteen of the largest companies in the industry (with listed securities) have reported to the Securities and Exchange Commission (as required) war contract cancellations totalling \$5,130,049,572.

No company in the industry has escaped the impact of these cancellations, and in many cases complete shutdowns of plants producing military aircraft will be effected.

The one bright spot in the picture is that contracts for development and experimental work have been virtually untouched, and the Services are encouraging prime contractors to forge ahead on new types and models. However, it is obvious that such work represents but a very small portion of the pre-Victory volume of business.

Contract terminations will leave idle at least two-thirds of the aircraft manufacturing facilities built during the war period. The problem that the industry seems to face—if these facilities are to be utilized is one of conversion rather than reconversion.

In contrast to many other industries, where the problem is that of reconverting to normal peacetime markets and recapturing prewar market outlets, the aircraft industry has made and is making nothing but airplanes and the essential components, of which the largest percentage has been designed for use in combat. It is obvious now that our present aircraft facilities can not and will not be used fully to manufacture aircraft, nor can our pre-Victory level of aircraft employment be maintained.

Employment May Drop to 200,000

The War Manpower Commission recently estimated that employment in the aircraft industry will drop from approximately 1,300,000 last July to about 200,000 by the end of this year. Cities in which the largest layoffs will probably occur are Los Angeles, Detroit, Buffalo, Chicago, Seattle, Baltimore, Hartford, Wichita, San Diego, Kansas City, Atlanta, Cincinnati, Dallas, Oklahoma City, Fort Worth, Omaha, Dayton, Tulsa and Flint.

The potential postwar markets for aircraft can be divided into three broad categories: military, commercial and private. So far as the military division is concerned, the Services appear determined that the U. S. shall continue to

maintain its front-rank position in the field of research and new model development.

There is the need, of course, for a standing air force, which has been estimated by some experts, to be in the neighborhood of some 60,000 airplanes, with annual replacements estimated at perhaps 10,000 units.

Navy aviation, according to Secretary of the Navy James V. Forrestal, will represent about 60% of the peacetime Naval strength, and will continue as an integrated part of the Navy.

Intensive development of domestic air transportation and further expansion of international airline operation will create some demand for the newest and most advanced transport types, which will work to the benefit of such companies as Douglas, Lockheed, Boeing and perhaps Martin and Consolidated-Vultee. In addition, the export market offers a fertile and undeveloped field for the sale of aircraft.

Exports Will Benefit Many

This can include the sale of aircraft to such countries as China, India, Africa and the South American republics, which are now handicapped economically by the lack of adequate air transportation and usable roads for ground transportation. Development of air transportation in these countries would undoubtedly work to the benefit of many American manufacturers, stimulating the sale of their goods.

This market might prove the most logical outlet for the sale of many of our surplus aircraft, which are not as efficient as our newer models, but which may handicap the sale of the new designs by virtue of overhanging the market at a low initial price.

The problem of disposal of surplus aircraft is not a direct marketing concern of the manufacturers, since that job is being handled by the Surplus Aircraft Division of the Reconstruction Finance Corporation, but the flooding of the private plane market—if that should occur—certainly will hamper to some degree the sales of new airplanes, especially in the light plane and private flying markets.

Availability of surplus transport types, such as the Douglas DC-3, may also hinder sales of new transports, except in those cases where newer models with improved performance are desired. It is the hope of the manufacturers to offer the market such improvements in new designs and types that the old prewar and wartime airplanes will be rendered obsolete and considered undesirable and uneconomical for commercial or private operation.

The private market also should offer appealing possibilities to manufacturers

Navy Wants 8,000 Peacetime Planes

Secretary of Navy James V. Forrestal has revealed that America's postwar Navy may require 400 warships and 8,000 airplanes in active commission. The rest of the fleet, consisting of 800 ships and 21,000 planes, all in operating condition, should be held in reserve, but not manned, to be ready for use when as, and if required. Stating that the immediate mission of the Navy is to continue to control the waters and ports of the Japanese Empire, he said the object was to prevent the military resurgence of Japan.

of airplanes ranging in size from the light two-place training plane to light twin-engine transports. It should be remembered that the private market includes not only the sportsman pilot, but also large business concerns with wide-spread interests where fast, efficient air transportation has real dollar and cents value.

There has been a tremendous growth in the number of people in this country who have learned to fly through the various wartime flying programs that were inaugurated to train all types of pilots, numerous men in the ground services of the Air Forces who are eager to fly, as well as many people who flew for the first time during the war and who want their own planes for postwar use.

What to do with the surplus manufacturing capacity? Some companies have already indicated their willingness to return to Government control those DPC-owned plants which they operated under contract during the war period. However, the need for stand-by manufacturing capacity in anticipation of any future emergency seems to be well recognized throughout the industry.

How Many Plants Needed?

Just what percentage is needed—or should be set aside—is one of the problems that has not yet been settled in the welter of all the confusion that has hit the industry since Japan quit fighting. After this has been determined, then consideration can be given to the conversion of the remaining unwanted and unneeded airplane capacity—and floor space—to other uses.

Here the problem is the determination of what peacetime products can be made by these converted aircraft manufacturing facilities that will be able to compete marketwise with those made by the established factors in a particular industry.

The metal-working equipment of the aircraft plants is regarded by some as par-

ticularly adaptable to the manufacture of such consumers' goods as refrigerators, washing machines and air-conditioning equipment, as well as automobiles. It is interesting to note that as early as April 25, 1944, the Aviation Corporation announced its plans to enter the home appliance field after the war.

Plans include the production of ranges, heaters, refrigerators, deep-freezers, wheel goods and electronic devices, but also provide for the continued manufacture of diversified aircraft products, such as engines, propellers and precision parts.

Another possibility that has been discussed is the conversion of these excess aircraft factories to the manufacture of pre-fabricated housing, on a low-cost basis. This is significant in view of the accumulated housing shortage and the possibility that construction may prove to be one of our most active industries in the early postwar years.

The Baruch Report on War and Postwar Adjustment Policies suggested that it may be possible to sub-divide the huge floor space of those aircraft factories to be closed down, and make such subdivisions available for a variety of different manufacturing activities by a number of small operators.

Fred C. Crawford, President of Thompson Products, Inc., and former President of the National Association of Manufacturers suggested in a speech last year in Los Angeles to the Aircraft Parts Manufacturers Association, that surplus aircraft plants be utilized as postwar maintenance, servicing and storage centers.

There is some question, though, whether the bases already established by the military services and commercial airlines, and enlarged so much during the war period are not now ample to provide such services.

All Strong Financially

One deciding helpful factor to the aircraft industry at this critical time is that the end of the war found practically all companies in the strongest financial position in their history. Liquid resources were accumulated during the heavy production period, and if contract termination is followed quickly by contract settlement, most companies should have no serious difficulty in riding out the period of readjustment and curtailment.

For example, in the case of the Southern California aircraft manufacturers, the close of the last fiscal year showed these companies to be in a strong current position; in the case of Douglas, net quick assets per share were equal to \$94.43; Lockheed, \$27.46; Consolidated-Vultee, \$26.36; North American Aviation, \$11.16; Northrop, \$7.32 and Ryan, \$6.40.

Further, the operation of the new reconversion tax bill should prove helpful; this makes available immediately postwar refunds, which in the case of the aircraft companies, amount to substantial sums in many instances: Douglas has a total due of \$6,985,000; Lockheed, \$5,764,062; North American Aviation, \$6,713,500 and Consolidated-Vultee, \$2,085,083.

Also, during the period of wartime operation, most companies established postwar contingency reserves, for just the emergency that prevails today, and these reserves are now large, as indicated by the figures for the following companies: Douglas, \$16,540,000; Lockheed, \$15,778,474; Consolidated-Vultee, \$19,000,000 and North American Aviation, \$14,451,334.

The profit margin outlook is not quite so dismal as might appear at first blush. With smaller unit quantities of airplanes

Delta Granted Longest New Route in History of CAB

Given Chicago-to-Miami; EAL Enters Detroit on '6'

THE LONGEST new domestic route grant in the Civil Aeronautics Board's history—1002 miles—was handed to Delta Air Corp. last fortnight in the Board's decision in the Great Lakes-Florida Case which authorized the extension of Delta's Route 54 from Cincinnati to Chicago on the north and from Knoxville to Miami on the south. In addition to the Chicago-Miami route for Delta, the Board also gave Eastern Air Lines a Detroit-Miami service by extending the carrier's Route 6 from Columbia, S. C. to Detroit via Charlotte, Winston-Salem and Greensboro/High Point, N. C., Roanoke, Va., Charleston, W. Va., and Akron and Cleveland, Ohio. As a condition of the certificate, Eastern may not serve Winston-Salem and Greensboro/High Point on the same flight.

The Delta extension from Cincinnati to Chicago is via Anderson/Muncie/New Castle, Ind. From Knoxville its new route extends southward through Asheville, N. C. to Greenville/Spartanburg, S. C. At the latter point it splits into an eastern extension via Columbia, S. C., to Charleston, S. C.; and a southern leg to Miami via Augusta, Savannah, and Brunswick, Ga., and Jacksonville. Delta will be restricted from serving Miami except on flight originating or terminating north of Jacksonville.

The Board found that the extension of Delta's Route 54 would give direct one-carrier service to much of the traffic already moving over that route; would provide much-needed air service within the Piedmont area; and would necessitate a minimum of duplicating competition. On the other hand, the new route will give Eastern point to point competition between Chicago and Miami and between Chicago and Jacksonville. Delta's application to include Louisville on Route 54 was denied by CAB as not required by the public convenience and necessity.

An interesting factor, and possible indication of an important trend in the Board's thinking, was reference to a possible interchange between Delta and TWA at Cincinnati to provide through-plane service to Detroit. By this means, the Board declared, "the combined service of Delta and TWA would succeed in ob-

taining a substantial share of the Detroit traffic." Delta had objected that granting a Detroit extension to any other carrier would cause considerable diversion of much traffic it now handles over part of the route. While the majority expressed no opinion on the subject of equipment interchange, the inference that it viewed such arrangements with favor was inescapable.

Eastern was selected for the Detroit-Miami route because it could offer the most complete service between Detroit, Akron and Cleveland and points on its extensive southern route system. This service could be operated by Eastern with greater flexibility, better utilization of equipment, and greater economy of operation than by any other applicant. In addition, Eastern required a grant of only 598 new route miles, compared with the 1,130 miles which would have been needed to put PCA into the Detroit-Miami service.

The Board took note of PCA's objection that Eastern's new route will parallel PCA between Detroit, Cleveland and Akron. In view of the very heavy volume of traffic moving on PCA's Route 14 between these points, and the high passenger fares charged by PCA (9 cents per mile between Detroit and Cleveland; 8 cents per mile between Detroit and Akron), the Board concluded that competition between these points would "not be adverse to the public interest."

The majority decision was signed by Chairman L. Welch Pogue and Members Edward P. Warner and Harlee Brauch.

Attached were two interesting concurring and dissenting opinions by Board Members Oswald Ryan and Josh Lee, who asserted that PCA rather than Eastern should have been selected to handle the Great Lakes-to-Florida traffic.

The Board denied the following applications: State Airlines, Inc., for service between Detroit and Jacksonville and between Pittsburgh and Jacksonville; American Airlines for Detroit-Miami service; Colonial Airlines for Detroit-Miami and Chicago-Miami service; National Airlines for Detroit-Miami service; and Pennsylvania-Central for service between Chicago and Miami and Detroit-Miami, and for nonstop service between Chattanooga on its route 55 and Asheville on Route 51.

being delivered, it would appear that unit prices will advance rather than decline. Also, most manufacturers are cancelling their sub-contracts, and bringing all the work possible back to the prime plant, which should increase the profit margins on work previously subcontracted.

While the postwar volume of business admittedly is going to be small in comparison with the wartime peak, many aircraft companies will still have enough work to operate their own plants on a 40-hour week, one-shift basis, and the total volume of business will still be well above that of any pre-war year.

For example, just two companies, Douglas and Lockheed, now have more unfilled orders on their books—Douglas—\$175 million in military contracts, and about \$140

million in commercial transport contracts and Lockheed—\$185 million in military work and perhaps \$150 million in commercial transports—than the entire industry's gross volume of business in 1939 (\$279 million). Glenn L. Martin has a backlog of about \$190 million; Boeing tops the military list with a backlog of \$222 million. Grumman, strongly entrenched in the Navy fighter field, has a backlog of about \$141 million. Consolidated-Vultee has a bank of about \$260 million combined military and commercial orders.

At present, the greatest problem in the aircraft industry would appear to be that of unemployment, and the only practical solution at this writing for those displaced workers seems to be that of seeking other fields of endeavor.

'Greatest' Drama of War Was Bombing of Germany

U. S. Press Has Failed To Tell It, Editor Says

By WAYNE W. PARRISH

THE ATOMIC BOMB has overshadowed all other air power developments in the world.

But the greatest air power story of the world until the atomic bomb has largely gone untold in the U. S. press and the American citizen has only the slightest conception of how air power paralyzed a nation and laid its cities to waste.

Somehow the great drama of Germany hasn't been transmitted to the people of the U. S. There have been a few photos in newspapers and magazines, and a few stories. But the American public has been misled into thinking that Germany wasn't bombed to defeat and that her industry is 75% intact and that night clubs are the big features of German cities.

Time Magazine, which has done one of the greatest journalistic jobs of all time in covering the historic developments during the war, fell down badly on reporting on Germany after the troops moved in. The New York Times Magazine a few weeks ago carried an utterly ridiculous article featuring night clubs and all the extraneous angles of what is the terribly bombed city of Berlin.

Even Wendell Berge as Assistant Attorney General of the U. S. made a simply asinine statement late in June that "probably three-fourths, if not more of the industrial power with which Germany waged this war, remains relatively intact."

Then some Senator made the statement that even the huge Volkswagen factory at Brunswick, Germany, was "back in operation." He should see the factory!

Since returning to USA early in August, I have been able to judge just how much is known back here about our strategic bombing of Germany by the questions asked. I, myself, was not prepared to witness the vast extent of destruction in Germany. The press services, special correspondents, newsreels and picture services, have failed utterly to get the greatest story in the world across—the greatest aside from the atomic bomb.

No Industrial Recovery

Germany was a great industrial nation. To think that it is recovering industrially is ludicrous. Even if there were machines and equipment, the Russians have moved all of them out of the Russian territory. And in the American and British zones, all you have to do is to fly over every German city, circling at low tree-top altitude, or wander by jeep through the endless miles of destruction, to realize that Germany was knocked for a loop from which it won't recover for decades.

Hamburg is a good illustration. The population is reduced from 1,600,000 to 1,200,000, with half of that gap at least having perished in bomb raids. For twenty miles along the docks of the great harbor there is nothing today but utter destruction. In the big residential area east

of the business section, the rubble hasn't been touched since the blitz of July 1943, and how many tens of thousands of German civilians are still buried under the rubble is anyone's guess. A vast area is utterly dead. And what one sees in Hamburg can be repeated in virtually every other city.

Berlin itself is a fantastic sight. There were 1,500,000 dwelling units in Berlin in 1939. As of late summer of 1944, 800,000 of these had been completely destroyed—uninhabitable. Only 300,000 remained whole or largely whole. Since late summer 1944, tremendous devastation was caused by Russian artillery and from the air. If there are 100,000 fully habitable dwellings left in Berlin, it is a miracle. Yet the newspapers talk of night clubs—shabby affairs catering to Russian and American soldiers, and not in the slightest typical of the tremendous devastation that is Berlin today.

No Mail or Communications

There is no postal or communications service in Germany. There is no transport for Germans except bicycles, walking, some street cars in most of the cities and parts of the subway in Berlin. What few trains are operating are for military use. It is impossible to transport enough food into the German cities to provide Germans with what they used to get in pre-war days (not that I'm advocating it), and there will be no coal for heating this winter. There is nothing in the shops.

But the most impressive thing about Germany is the almost hopelessness of rebuilding what was destroyed by bombing. Even if the Berliners have the manpower, materials and equipment, 20 years will be required merely to rebuild the houses. And this estimate does not include public buildings, transport or industry.

Far from trying to work up sympathy for the Germans, I'd like to get some enthusiasm for the superb work of the RAF and U. S. strategic bombers which paralyzed the industrial capacity of Germany. The fact that we had to whip a well-equipped German army in France has belovely the fact that Germany itself was rapidly becoming an industrial shell, and that when we crossed the Rhine, there was no chance of organized opposition.

Perhaps one reason for the lack of analytical press articles from Germany is that our American correspondents have concentrated on moving up forward with the ground armies and have been covering the political events. Few American correspondents have seen more than a few German cities. And from the ground one can miss a whale of a lot of damage.

Somehow the AAF has missed the boat on its public relations and I strongly suspect it is the fault of USSTAF, U. S. Strategic Air Forces, with headquarters in London and Paris. The dozen aviation writers, of which I was one, were treated to ineptness of epochal proportions as far as USSTAF was concerned, and if this treatment is typical of the American public relations in Europe, it is no wonder that the American people have no idea of

what air power did to win the European war.

What the bombers did to German transport, industry and civilian life is the greatest single drama in the world today. There has never been anything like it. It is more dramatic than the defeat of Japan, for Germany has been an age-old nation of great industrial reputation. Its cities were old and well organized. It is more dramatic than the political fuses of today because there have always been political fuses in Europe. What the American people would like to know (I think) are the answers to the questions I have heard. Just what is a bombed city like? How do people live? What are they doing? The general public is not getting the story in the general press.

If Germany were to recover in a year, then there wouldn't be a big story. But what happened to Germany is as historical as anything in the past hundred or so years—outside of the atomic bomb.

It is obvious that the Germans endeavored to clean up the rubble and make repairs when the bomb raids first started. But the bombing continued at an accelerated pace. It was impossible to repair the damage. Finally the bombing became overwhelming. Today the cities are jagged broken walls, hollow shells, twisted and burned out factories, and the people are living under the ruins or out in the suburbs in shacks.

The Senator who said the Volkswagen plant at Brunswick was back in operation should see the plant. It was one of the largest factories in the world. It was the pride of Germany. But it was knocked out. There are portions which are relatively undamaged, but any idea that this factory can be put back in operation except after very extensive and major repairs is nuts. It is true that down at one far end, in a part of the plant that would represent about one medium-sized automobile garage in Toledo, O., the American army is directing the assembly of German jeeps from material that was on hand. When those jeeps are assembled, the assembly line is kaput. There won't be any more. The operation is peanuts. It has no relation to the fact that our bombers knocked the plant out of operation—and it will stay out for a long time.

If Wendell Berge thinks that three-fourths of German industry is relatively "intact," he ought to see it. It is intact, all right, in twisted, burned and blasted out ruins. Of course there are some factories that were untouched—but you won't find more than a handful of factories untouched that were building essential war materials.

Very Poor Public Relations

The AAF can well be proud of its job on Germany. So can the RAF. But whoever muffed the ball on public relations isn't any friend of air power, for air power needs friends and the American people still need to be shown and told the story. They should be told the story of wrecked industrial plants running for miles on end, of hundreds of thousands of Germans still buried under the rubble, of the utter lack of transport at the end of the war, of the complete economic paralysis of the country. Because in so knowing about it, there won't be any more question about air power. It was air power that gave the decisive touch. Germany was a shell before the ground armies moved in. If you don't believe, go see for yourself—you'll get the most appalling shock of a lifetime.

Both Sides of CMA-Aerovias Braniff Fight Told

THROUGH their affiliates, Pan American Airways and Braniff Airways are waging a bitter struggle in old Mexico for a place of preeminence in the Republic's plans for a greatly expanded postwar air transport system. The two companies—Compania Mexicana de Aviacion, S. A. and Aerovias Braniff, S. A.—have crossed swords several times during the past year in procedures before Mexican government agencies but it was only a few weeks ago that physical force was resorted to with the result that the battle today is being waged in the Mexican courts. Two incidents, one involving CMA's use of oil trucks, cars and other mobile equipment to block departure of a Aerovias Braniff plane until CMA had been paid what Aerovias Braniff officials regarded as an exorbitant landing fee, hit the newspapers and the aviation section of Time Magazine to focus attention on a fight that will have far reaching repercussions in both the United States and Mexico. As this was written, Aerovias Braniff was operating its Mexico City-Merida route under authority of a temporary injunction which restrained the Department of Communications and Public Works from enforcing an order which suspended Braniff's temporary permit to operate the route. Because the fight involves use of airports which were built under the Hemispheric Defense program with U. S. funds and because both the Mexican and U. S. Governments will be compelled to formulate some definite policies relating to plans for expanding air service in Mexico, AMERICAN AVIATION magazine wired the heads of both of the affiliate companies for the story behind the Merida and Vera Cruz incidents. From CMA, it received a nine page telegram. From Tom Braniff, president of Aerovias Braniff, a personal visit and an explanation backed by considerable documentary evidence. The explanations follow:

"SINCE 1924," wired Elton Ross Silliman, CMA general manager, "CMA has been operating in Mexico installing its own facilities, constructing airports and in general pioneering the civil aviation field in order to establish a Mexican flag line service comparable to the best in the Western hemisphere.

"Its investments total many millions of pesos and its expansion has been gradual, geared to its ability to render adequate service on the routes covered by its concessions. It has no desire to become nor is it monopolistic in any sense. Even today, after 21 years, it flies less than 15% of the total route miles covered in concessions and permits granted to all operators in Mexico.

CMA 'Wants to Cooperate'

"CMA's policy has been and is now one of cooperation with other airlines. CMA has used and will use the legal means at its disposal for the correct interpretation and application of the spirit of the Mexican Communication's law, particularly that portion designed to prevent uneconomic duplication of established operating routes. This policy is not directed at any particular airline but is founded upon the belief that effective control of duplication must be maintained in order to protect all civil aviation in Mexico.

"The present contention with Aerovias Braniff over its paralleling certain CMA routes is merely incidental to the policy at issue. Aerovias Braniff in late 1943 and early 1944 obtained experimental permits covering more route miles than those being operated by CMA. Since that time Aerovias Braniff has made no attempt to install airports and allied facilities for the operations of its services. On the contrary it elected to commence its operations in the spring of 1945 over only that small portion of its routes which directly duplicated those of CMA between Laredo and Mexico City and in July between Mexico City and Merida, Yucatan.

"These routes had long since been pioneered, developed and established by CMA. Aerovias Braniff operations over its non-parallel routes which involved substantial investment have strangely enough not been commenced to date. Braniff's contention that it has not commenced flying other sections of its routes because of unavailability of planes does not account for its failure to have long since installed the airports and facilities which it will need now that planes are available.

"Braniff complains that CMA has refused use of the airports and facilities at Vera Cruz and Merida. Braniff would make it appear that this policy was conceived after Braniff inaugurated its Mexico City-Merida service. As far back as February, 1945 Braniff was informed that CMA would not enter into any definite agreement covering the use of CMA's ground facilities at the airports in Vera Cruz and Merida.

"Under Articles 360 and 363 of the Mexican Communications Law privately owned airports are obligated to permit landings and extend meteorological service to other airlines upon the payment of the nominal fees authorized by the Department of Communications. CMA has at no time denied Braniff these services and the incident of blocking Braniff's take-off from Merida arose from Braniff's attempt to escape payment of the authorized landing fee. Incidentally the plane could not be held up without approval of government Commandant. Time Magazine reports CMA fieldmen at Vera Cruz refused to switch on landing lights for a Braniff landing after dark. This is untrue. The field was lighted promptly upon request from the ship. If there was any delay or if the lights had not been turned on prior to the plane's arrival, it was because Aerovias Braniff deliberately refused to file its flight plan or estimated time of arrival in contravention of regulations requirements and contrary to the most elementary safety precautions and despite the hazard involved in flying congested area without notifying position or other vital information.

"Time Magazine quotes Stockdale, vice president of Aerovias Braniff, as saying 'These airports were built under Lend-Lease laws of the United States.' This statement is puerile. There are no Lend-lease built airports in Mexico. Time reports that Mexican Minister of Communications ruled that fields should be considered public property exclusive to no one. This is incorrect. The Minister referred to the fields as belonging to CMA but open to public service subject to CMA's legal right to charge fees for landings and services.

"Braniff, without risking investment, has been continuously enjoying such services. The referred to ruling in no way amplifies the services to which Braniff is entitled. Must remember that Mexico for almost 20 years has been an adult in aviation. Airline operators are held to strict compliance with well defined communications law and no current legislation makes it possible for a simple ruling to make airfields 'public property'.

'Never Spent a Nickel'

"It would seem though that Braniff, balked in its attempt to operate on someone else's investment, is now trying to bring about the Federalization of private airports in development of which it has never spent a nickel. CMA maintains that Braniff's activities in duplicating long established routes are contrary to Mexican law and constitute unwarranted, unfair and improper speculative competition and CMA is willing to abide by Decisions of Mexican courts. CMA considered it has been upheld in this contention in that on August 2 (unreported by Time) the Ministry of Communications cancelled Braniff's experimental permit between Mexico City and Merida."

TOM BRANIFF, president of Aerovias Braniff and also president of Braniff Airways, told a representative of AMERICAN AVIATION that his company had obtained, through regular and established procedures, the temporary permits to operate various air services in Mexico, that the routes it is now operating were selected by the Mexican government as being the most urgent from the point of the need of the service, that all of its efforts to enter into contract with CMA for use of certain airfields were blocked by CMA which refused to enter into negotiations for their use.

In support of Aerovias Braniff's efforts to negotiate a contract with CMA for the use of certain airports, Mr. Braniff exhibited a copy of a letter which read as follows:

Compania Mexicana De Aviacion, S. A.
Boliver 21 Mexico, D. F.
Feb. 16, 1945.

Mr. F. C. Dyer,
Operations Manager,
Aerovias Braniff, S. A.
Apartado Postal No. 1441,
Ciudad.

Dear Mr. Dyer:

In reply to your letter of Feb. 12 I advise that in view of the competitive aspect of your proposed operations, we are not now prepared to enter into any definite agreement covering the use of ground facilities at our airports.

Very truly yours,
E. R. SILLIMAN.

On June 16, Mr. Braniff stated, Dyer sent CMA a contract identical to the one by which both CMA and Aerovias Braniff are permitted to use the airport at Monterrey, Mexico. This airport was built by American Airlines, Inc. Here the fee was 30 pesos a landing and the contract included the use of all of the airport facilities except actual space for ticket offices in the terminal building.

Silliman, according to another copy of a letter produced by Mr. Braniff, wrote in part to Dyer on June 19th as follows:

"As regards the proposed contract as prepared by you for the foregoing purposes (use of airports and facilities at Vera Cruz and Merida) we wish to advise that it is absolutely unacceptable. Should we enter into a contract, the terms and conditions of which will be studied by us as early as possible, such contract will only cover the authorization to Aerovias Braniff's aircraft to land in the mentioned airports, and our furnishing of meteorological information. As soon as we have completed our study of a contract covering landings and meteorological information, we will contact you further to arrive at the definite conditions and terms thereof. Very truly yours, Compania Mexicana De Aviacion, E. R. Silliman, general manager."

Mr. Braniff stated that up to the time

that they started their operations on the Mexico City-Merida route, they heard nothing further from Silliman as to the contract which CMA said would be submitted in the letter of June 19th.

Braniff then produced a letter which purported to be CMA's instructions to its Airport Managers at Vera Cruz and Merida regarding the treatment they were to accord Aerovias Braniff personnel and equipment. The copy of the letter was as follows:

Compania Mexicana de Aviacion, S. A.
July 3, 1945.

Aerovias Braniff, S. A.
Paseo de la Reforma No. 1,
Mexico, D. F.

Att'n: General Manager

Dear Sirs:

As a courtesy principle, we wish to inform you of the instructions given today to our Airport Managers at Veracruz, Ver. and Merida, Yuc:

"Airport personnel will not furnish Aerovias Braniff any service, nor will it permit said Company to use the buildings, installations, equipment, and other auxiliary facilities: It is expressly excepted from the foregoing the permit to land and take-off, and the use of runways, as provided for in the Regulations in force, as also the meteorological information necessary for the safety of flights and landings which Aerovias Braniff may request. In each case the runways and information services are used, the corresponding charges will be collected from said Company.

It is forbidden for Aerovias Braniff personnel and ground equipment to enter the Airports, and adequate measures therefore are to be taken."

Respectfully

Cia Mexicana de Aviacion, S. A.
E. R. SILLIMAN, General Manager.

Despite this threat of possible trouble, Aerovias Braniff went ahead with its plans to inaugurate service over the Mexico City, Vera Cruz, Merida route on July 1.

After leaving Mexico City on schedule, the plane landed at Vera Cruz without incident. There were Mexican officials aboard, including Pedro Tornel, of the Ministry of Communications. Unpleasantness started when Braniff passengers were compelled to use the plane's cargo boxes to unload. Passengers planning to board the plane had to crawl through the fence surrounding the airport. The toilets in the airport building were locked. Aerovias Braniff's service truck and personnel were stopped at the entrance gate which was closed.

It was then, Mr. Braniff stated, that the military commandant of the airfield ordered a military truck to break down the gate. This order was carried out and after the Mexican army truck had pushed through the gate, Braniff's service truck and service personnel came on the field and serviced the plane.

Realizing that it could not expect such assistance from the Army at Merida because it is not a military airport, Braniff personnel decided to reduce the load of passengers so that enough gasoline could be carried for the round trip, from Vera Cruz to Merida and back to Vera Cruz again. This would eliminate the necessity of trying to refuel at Merida.

The trip to Merida, although delayed for a considerable time at Vera Cruz, was negotiated without serious incident although the official welcoming party at Merida got a chilly reception and welcoming ceremonies generally were called off. But according to Mr. Braniff, some 500 Mexicans outside the field took up the chant "Vive Braniff. Vive Braniff"



Trucks and other mobile equipment of Compania Mexicana de Aviacion S.A. are shown blocking the prospective take-off of an Aerovias Braniff plane at Merida, Mexico, when officials of the latter company refused to continue payment of 85 pesos landing fee charges which it considered excessive. Take-off was later accomplished when Aerovias Braniff paid the charges.

to give encouragement to Aerovias Braniff personnel who were inaugurating the new service. Upon payment of an 85 pesos landing fee, which Mr. Braniff pointed out is 5½ times the charge at Chicago Municipal Airport and 2½ times that proposed at the new Idlewild Airport, the plane started the return trip to Vera Cruz.

Because of the delays, it was dark when Vera Cruz was reached. The airport was dark. Mr. Braniff says that from pilot personnel he was informed that a request was made to the airport personnel to turn on the landing lights. There was some delay but later the lights came on. Braniff said that his employees were later told by some Vera Cruz airport personnel that the operator going off duty had been told not to turn the lights on for the returning plane. The relief operator later turned them on and according to Mr. Braniff was fired by CMA. Later he was given a job with Aerovias Braniff.

The plane then took off for Mexico City, landed there sometime later having completed its first round trip, as scheduled, although several hours late.

On July 17 when Aerovias Braniff refused to continue payment of 85 pesos per landing at Merida, CMA personnel drove oil trucks, cars and other mobile equipment around the Braniff plane, to prevent its departure. Aerovias Braniff finally paid the fee and has been operating under this arrangement since. Unable to service its plane at Merida, it is still carrying enough gas for the roundtrip between Vera Cruz and Merida at greatly reduced payloads.

Since the inauguration of the service, CMA filed with the Minister of Communications a lengthy report in which it charged that Aerovias Braniff was operating in violation of safety regulations. But Mr. Braniff exhibited copies of the reports of Technical Inspector Louis Lopez Malo and Air Services Inspector Raul Gomez Trejo in which they gave Braniff Aerovias a clean bill of health after having inspected all phases of Braniff's operations.

Air Chief Resigns

Alfredo Lezama Alvarez, chief of the department of civil aviation of Mexico, has resigned his position, ostensibly because of the trouble between CMA and Aerovias Braniff. No successor had been appointed at this writing. Lezama had written a report to his superior exonerating Aerovias Braniff from any wrong-doing, it is said.

On Aug. 2, Pedro M. Tornel, secretary of the Department of Communications and Public Works, on petition of CMA, issued an order suspending Aerovias Braniff's temporary permit to operate the Mexico City-Merida route. He contended in general that Aerovias Braniff had not complied with the obligation of law pertaining to radio-telephone and other communication services, that it had not conformed to the requirements relative to aeronautical personnel, landing fields, flight plans, and in addition stated that the company "exploits the Mexico City-Merida line without the Department of Communications having first authorized its operation."

Braniff immediately filed a petition in the Mexican courts for a temporary injunction restraining the Minister of Communications from carrying out the purposes of the order. The temporary injunction was granted and a hearing for the purpose of making the injunction permanent was scheduled for Aug. 20.

In partial proof of his company's authority to operate, Mr. Braniff produced the following letter:

Ministry of
Communications and Public Works
Civil Aeronautics Department Headquarters
24.-I 33421 92906
Subject: Mexico-Havana Route
Mexico, D. F., June 2, 1945.

Aerovias Braniff, S. A.
Paseo de la Reforma No. 1,
Mexico, D. F.

It has come to the attention of this Ministry that the Republic of Cuba, through the Ministry of Communications of that country, has granted you a concession to operate public air transport service between that country and Mexico, and in view of the fact that this Department of Federal Executive has authorized you to conduct air service between Mexico, Veracruz, Merida and Havana, it has decided, on account of the foregoing reasons, that in the shortest time possible you should initiate the service mentioned, filing immediately for their study and approval, if forthcoming, the respective schedules and fares.

PEDRO MARTINEZ TORNEL.

The fares and schedules were accordingly filed, Mr. Braniff stated. He then produced a copy of a letter signed by Col. Rafael Avila Camacho, undersecretary of Communications, dated Mexico City June 25, 1945, addressed to Aerovias Braniff which read as follows:

"We are pleased to attach a temporarily approved copy of each one of the schedules that you sent to cover the Mexico-Ciudad Victoria-Nuevo Laredo and Mexico-Puebla-Vera Cruz-Merida routes that will be in effect beginning July 1."

Mr. Braniff said he had written a full

Aviation Calendar

Sept. 2—Interhemisphere conference on frequency allocations and revisions, Rio de Janeiro.

Oct. 4-5—Institute of Aeronautical Sciences, Detroit area meeting.

Oct. 16—First annual meeting, International Air Transport Association, Montreal.

Oct. 25—Institute of Aeronautical Sciences, Washington, D. C. area meeting.

Oct. 31-Nov. 3—National Aviation Clinic, Oklahoma City. Pre-clinic conference, Oct. 27.

Dec. 17—Institute of Aeronautical Sciences, Washington, D. C., meeting.

report of the situation to both the President of Mexico and to George S. Messersmith, the U. S. Ambassador to Mexico, asking for relief. He said it was his impression that the State Department is greatly concerned over CMA's attitude and action.

"I feel this is a test case," Mr. Braniff stated. "Either Pan American is going to dominate our relations in aviation matters in the foreign field or the United States government is going to take a firm hand and get the relief which will permit us the use of airport facilities in Mexico built with U. S. funds."

Mr. Braniff pointed out that many of the airports in question were built by Pan American Airways with U. S. funds under the Hemispheric Defense Plan. Pan American organized the Airport Development Corp. for the purpose of building these airports under War Department contracts, he stated. Under the agreements by which these airports were built in foreign countries, public use was guaranteed, Mr. Braniff said. One proviso in the agreements, however, limits the use of these airports as far as the United States is concerned to airlines licensed by the Civil Aeronautics Board. Technically Aerovias Braniff does not enjoy this distinction. At present there is a proceeding before CAB wherein Braniff Airways seeks approval of its acquisition of control of Aerovias Braniff. A CAB examiner has recommended against approval of the acquisition.

Meanwhile Aerovias Braniff is going ahead with its efforts to have its temporary concessions made permanent. Its 237 Mexican employees have filed a petition in support of this move. They point out that their company has spent 4,000,000 pesos in the training of employees in skilled and technical phases of the industry and in building communication systems and in providing equipment.

"Air transportation in this Republic in the past has been largely controlled by a single company. Such a situation is abhorrent to the Mexican sense of freedom. It promotes inefficiency and retards progress. It breeds arrogance both towards employees and the public. It maintains its position through power and influence instead of through improvement of service and proper consideration of the needs of the public," this petition of the Aerovias Braniff employees recites.

Mr. Braniff stated his company will build airports and install the necessary navigational equipment where necessary as soon as franchises are made permanent. In his letter to the President of Mexico, he said his company already had

Details of B-36, B-35, B-42 Revealed Following V-J Day

Convair, Martin, Douglas Planes Were Top Secrets

THE THREE oft referred to super-bombers—B-36, B-35 and B-42 which the Army Air Forces was readying for the war in the Pacific can now be identified following the Jap surrender.

The B-36 is a six engined combat version of the recently announced C-99 transport designed by Consolidated Vultee Aircraft Corp. The prototype version is reportedly nearing completion at San Diego, and will probably be powered by 3,000 hp Pratt & Whitney Wasp Major engines. According to information released on the C-99 and the Model 37 commercial version, the B-36 has a gross weight of 320,000 lbs., wingspan of 230 ft., and overall length of 183 ft. It is of midwing design with tricycle landing gear. The engines are faired into the trailing edge of the wing and drive pusher propellers. The C-99 was said to have a range of 8,000 miles with 19,000 gals. of fuel. It is generally believed that the B-36 is the bomber with a range two and a half times that of the B-29 referred to by General Arnold at a recent press conference.

The B-35 is a 178 ft. flying wing designed by Northrop on which the Glenn L. Martin Co. did much of the engineering work. Specifications for both the X and Y contracts now in process of fulfillment at Northrop are understood to have called

for four pusher-mounted 3,000 hp Pratt & Whitney Wasp Majors. The X-ship is reportedly nearing completion at Hawthorne.

Contrary to popular conception, the B-42 is not a superbomber, but a medium or attack bomber of a somewhat unusual nature designed by Douglas. It is powered by two liquid-cooled Allison V-1710 engines driving contra-rotating pusher props which are reportedly located behind the tail surfaces. It is understood that Douglas plans to adapt this aircraft to a commercial transport, and that it may be the final version of the Skybus.

Two new Navy fighters—the F8F and FR-1—were likewise close to combat when the war ended. The former is the Grumman Bearcat, a single seat fighter with a flush riveted R-301 skin. Powered with a single Pratt & Whitney R-2800-C engine driving a four bladed Aeroprop, it can reportedly both outrun and outclimb the larger twin-engined F7F Tiger-cat.

The FR-1 is the much discussed Ryan Fireball jet fighter. Actually it is a combination aircraft with a conventional Wright air-cooled radial engine driving a propeller in the nose and a General Electric turbo-jet engine in the tail. It is understood that the Navy turned to the combination principle to counteract the long take-off run which makes pure jet aircraft unsuitable for carrier use.

made a tremendous investment based solely on temporary concessions, that he felt that Aerovias Braniff had proved its competency to operate the routes on the basis of the record made and that the company was therefore entitled to permanent franchises.

With reference to CMA's charge of 85 pesos for landing fees, Mr. Braniff recalled that when CMA was ordered to discontinue use of the old airport at Monterrey because it was unsafe, and ordered to use the American Airlines airport, CMA objected strenuously over a long period of time to the proposed landing fee of 30 pesos which included use of all airport facilities, except ticket office space.

Mr. Braniff said that in connection with all of his negotiations with the Mexican government for temporary operating per-

mits, he had kept the U. S. Government fully advised. He told of conferences with Department of Commerce, State Department and CAB officials in which he explained what his company was doing in Mexico.

"At no time was I told that what we were doing in Mexico was inimical to the best interests of the United States," he said.

He said that his company had been seriously handicapped in constructing navigation facilities at some airports where they were now operating because CMA refused to permit them to erect these facilities on CMA operated fields and because CMA controlled the land adjacent to some of the airports on which such facilities might be installed.

"We're losing money on the operations as we are compelled to conduct them today but we're going to see this thing through because we believe there is a fundamental principal of justice and fair play involved in which the public has a deep and lasting interest," he declared.

Key Joins Hill & Knowlton

William G. Key, formerly with Aviation News, has joined Hill & Knowlton to serve on the public relations staff of the Aircraft Industries Association of America in Washington. He has been assigned for the present to supplying Washington information to AIAA members.

J. L. Straight Leaves AIAA

James L. Straight, Western Manager of the Aircraft Industries Association, has resigned to return to private industry as of September 1.

Aerovias Braniff Wins Decree

Aerovias Braniff S. A. on Aug. 23 won a decree in the District Federal court at Mexico City which made permanent the temporary injunction which restrained the Ministry of Communications from carrying out its order suspending Aerovias Braniff's temporary permit to operate between Mexico City and Merida, via Puebla and Vera Cruz. Aerovias Braniff had been operating the route under the authority of the temporary injunction.

Industry Dealt Severe Blow By Cutbacks and Cancellations

But Army, Navy, WPB Had Been Planning for Them

THE CESSATION of hostilities with Japan brought the aircraft manufacturing industry a jolting blow, with wholesale cancellations and cutbacks. The inevitable layoffs began from coast to coast, while manufacturers started peacetime plans, and wondered what percentage of the huge wartime business would be salvaged in post-war activities.

Both the Army and Navy were quick to cut out unwanted and unneeded types, and even production of the newest combat and transport types were scaled down substantially with the end of the fighting. Most companies were given the go-ahead sign on their experimental and research work, but this obviously represents only a fraction of the volume of business that was on the books until the end of the war.

The Services and the War Production Board have been planning for more than a year now for just these cutbacks and cancellations, but it cannot be denied that the unexpectedly sudden ending of the war with Japan caught the Services, the Government and the companies themselves not fully prepared for the drastic reductions that have been ordered since August 14, when Japan indicated that she would accept the terms of the Potsdam agreement.

Many plants have now had all their contracts cancelled, and for them there is no alternative but closing. This is true mainly of the plants built during the war period by Defense Plant Corporation funds, solely for the purposes of producing aircraft for our fighting forces in this war.

Navy Plans Still Unreported

No complete picture was available last fortnight on the Navy Bureau of Aeronautics planned cutbacks and cancellations, but the Army Air Forces has released all its data available to date. It has announced that its scheduled aircraft program and other materiel requirements of the Army Air Forces will be reduced by approximately nine billion dollars. This includes a reduction of more than 31,000 in the number of airplanes it had previously scheduled, which represented a total value of approximately seven billion dollars with spares and related installed equipment.

This represents a cutback of about 90% from the schedule in effect before the end of the war for production during the remainder of 1945, and is about in line with what most aircraft manufacturers had generally expected with the end of the war—but it is staggering, coming as quickly as it does and only three months after the end of the war in Europe, which itself had resulted in substantial reduction of certain schedules. For the calendar year 1946, the schedule now calls for about 6% of the airframe weight production that had been originally scheduled.

Most of the sharp reduction in weight scheduled is accounted for by the substantial cutbacks ordered in the heavy

bomber classification. The very heavy bomber group—represented almost entirely by the B-29 Superfortress has been cutback 7,650 units, which is 60% of the airframe weight reduction in all types, and is an 87 per cent cut from the bomber schedule in force before the war with Japan ended.

The remainder of the cutback in scheduled aircraft production shows a reduction in the number of fighters by 13,550, in transports by 5,200, and in trainers and all other types by about 4,900, representing respective cutbacks of 80 per cent, 88 per cent and 90 per cent. Cutbacks of individual models of the most desired types scheduled for production, in units and per cent, are shown in the table below:

	Number Cutback	Percent- age of Cutback
B-29 Superfortress	5,345	87
A-36 Invader	1,856	94
P-47 Thunderbolt	4,265	91
P-51 Mustang	6,419	85
P-80 Shooting Star	2,017	58
C-54 Skymaster	1,540	89
C-82 Packet	781	82
C-47 Skytrain	837	82
C-46 Commando	1,450	84

What these reductions will mean to the aircraft industry as a whole is indicated by a recent announcement of the Securities and Exchange Commission, which stated that fourteen aircraft companies with securities listed on national stock exchanges have reported a total of \$5,130,049,572 in war contract cancellations since August 14. These reports were filed with the SEC to comply with a recent ruling that such companies report immediately cancellations of war contracts where the terminated portion of the contract is 20 per cent or more of the total sales of the previous fiscal year. The SEC has announced a total of \$6,837,609,461 thus far in war contract cancellations of which the above aircraft cancellations represent 74.5 per cent.

United Aircraft Corporation contract cancellations have been estimated by the SEC at \$833,000,000, but stated that this company reported that "Termination notices have been received by this corporation with respect to the vast majority of contracts with the United States Government," but did not report the specific amount involved. Other cancellations reported to the SEC include:

Company	Dollar Value of Cancellations
Curtiss-Wright Corporation (including Wright Aeronautical) ..	\$1,218,000,000
Boeing Airplane (not including Canadian)	830,000,000
Bell Aircraft Corporation	232,000,000
Douglas Aircraft Company	325,000,000
Republic Aviation	242,000,000
Grumman Aircraft Engineering ..	240,000,000
North American Aviation Corporation	147,915,243
Lockheed Aircraft Corporation ..	191,255,794
Fairchild Camera and Instrument Corporation	14,000,000
Waco Aircraft Company	13,000,000
Northrop Aircraft, Inc.	62,357,535
Beech Aircraft Corporation	23,591,000

Truman Revokes Overtime Order

President Truman has revoked the three-year old Executive Order restricting the payment of overtime for work on Saturdays, Sundays and holidays. One effect of the revocation will be to put back into operation scores of collective bargaining contracts which provide that employees shall be paid time and a half or double time rates for working on Saturdays, Sundays and holidays.

Among the companies which also reported the amount of unfilled orders remaining on their books are:

	Dollar Value of Unfilled Orders
Boeing Airplane Company	\$ 222,630,000
Lockheed Aircraft Corporation ..	185,000,000
Douglas Aircraft Company	175,000,000
Grumman Aircraft Engineering Corporation	141,000,000
Republic Aviation Corporation ..	37,000,000
Beech Aircraft Company	6,965,000
Fairchild Camera and Instrument Corporation	11,000,000

The effect of these cutbacks and cancellations on the various aircraft manufacturing companies is summarized below:

Douglas Aircraft Company: Production at the Oklahoma City plant of C-47s and C-117s will be discontinued. Production of the advanced A-26 medium attack bomber will be reduced at Long Beach and Tulsa, and will probably be completely eliminated later at Tulsa. New cutbacks in C-54 production schedules will necessitate further reductions in employment at three plants, will force the complete shutdown of the Chicago plant within a month. At Santa Monica, where 750 employees were laid off last week, an additional 1,400 shop and clerical workers were discharged, and at El Segundo, the total layoffs were increased to 750 by the recent discharge of 450 additional workers. Experimental work for the Navy at El Segundo will continue about the same as it has been in the past.

Glenn L. Martin Company: With the B-26 already out of production, the end of the war with Japan did not bring unusually severe or unexpected cancellations to this company. Experimental contracts were unaffected, and the company reports firm Government and commercial contracts on hand in the amount of approximately \$190,000,000, which will permit this facility at Baltimore to operate continuously through September, 1946. This plant reopened August 20 on an eight hour day, five day week schedule. A reduction of 10 percent in the engineering staff is planned now, in addition to the manufacturing personnel already discharged. It is reported that the company is now negotiating with commercial airlines for about \$44,000,000 of transport aircraft, on which engineering designs are not yet completed, and continued progress is being made on the stratovision plane designed in conjunction with the Westinghouse Electric & Manufacturing Company.

North American Aviation: The Inglewood plant returned to a five-day, 44 hour week. Cancellation of the B-25 contracts at Kansas City will compel closing of that plant (valued at \$25,000,000), which is to be returned to the Government, which will retain about 2,500 employees temporarily to handle spare parts and special projects. All contracts have been cancelled at the Dallas plant, including the C-82 Packet for the Navy. An expanded engineering program is now planned for the Inglewood plant, which will probably involve an engineering employment project.

Boeing Airplane Company: While B-29 schedules have been reduced, the company has a contract for the latest modification of the

Superfortress. The Seattle-Renton plants are scheduled to produce 155 B-29s this month, dropping to 123 in September, and thereafter cutback to 20 per month.

Bell Aircraft Corporation: Scheduled production of the B-29 at the Bell-Marietta (Georgia) plant has been terminated. The company has begun negotiations of the DPC-owned plant at Niagara Falls to manufacture commercial, industrial and military helicopters. Relatively recent acquisition of D. Roy Shoultz (as Vice-President) from General Electric Company points to continued research work on jet propulsion. It is now planned to produce special machinery at the Burlington, Vermont plant. A specific offer to purchase the plant has been made to the Reconstruction Finance Corporation, and interim lease arrangements are now being concluded. About 9,000 employees have been discharged at the Marietta plant as a result of the B-29 contract cancellations, and approximately 500 have been laid off at the Buffalo and Niagara Falls plants. It is expected that several hundred more will be released shortly, and that employment should be stabilized at approximately 5,000 workers. Some production is continuing on the P-63 target planes (for frangible bullets) while work on several experimental planes continues.

Northrop Aircraft Corporation: This company's experimental research and development program was virtually untouched by contract cancellations since the end of the war. Production schedules on the P-61 Black Widow night fighter have been reduced, but the company states that its present backlog amounts to \$2,300,000 per month through August, 1947.

Curtiss-Wright Corporation: The engine plants of Wright Aeronautical Corporation at Woodridge, New Jersey and Lockland, Ohio will be closed as a result of contract cancellations. Employment will be reduced at the Curtiss factory at Buffalo, where production will be converted to the commercial version of the C-46 Commando. Personnel will be reduced sharply at the Wright Patterson plant where production of engines will continue. The Curtiss Propeller Division will close its plants at Beaver, Pa., and Indianapolis, and continue production on a reduced scale at Caldwell and Clifton, New Jersey. Production schedule of aircraft for the Navy have been reduced to 378 airplanes for September, 350 for October, with a further reduction scheduled for November, and the schedule leveling off in December. Production of the P-4U will be drastically curtailed, and limited production will continue for the Helldiver, the Seahawk, the Avenger, the F7F and the P-5F. The company announces that it produced 27,000 aircraft, 139,000 engines (with a total of 260,000,000 h.p.) and 146,252 propellers during World War II. The SEC states that this company has reported \$1,218,000,000 in war contract cancellations, of which Curtiss-Wright has assumed \$616,000,000 and Wright Aeronautical Corporation, \$602,000,000.

Ryan Aeronautical Corporation: Navy contract for jet fighters have been reduced 45 percent, and the contract period for delivery of the airplanes has been extended six months into the latter part of 1947. Only a week prior to the end of the war, the company had announced plans to triple production, but the cessation of fighting has resulted in a schedule which will level off the production of Ryan Fireballs at the rate reached last July. No definite plans for personnel reductions and readjustments have yet been made but these may be held to a minimum by returning to the Ryan plant the manufacture of major assemblies which have been made by sub-contractors. Up until recently about 45 percent of the aircraft had been built by sub-contractors. Departments not directly concerned with production, such as office staff, production control, tooling, outside production and similar activities will be reduced substantially.

Ford Motor Company: With B-24 Liberator production terminated at the Willow Run plant, the end of the war brought Ford cancellations on its Pratt & Whitney engine production at River Rouge and cargo gliders at the Iron Mountain, Michigan plants.

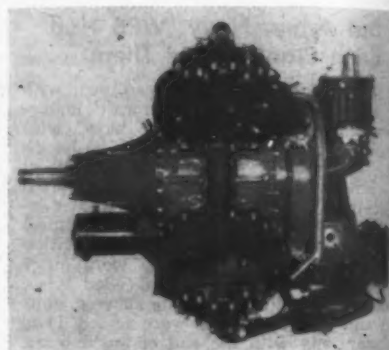
GM Develops 200 hp Engine; Buick Studying Production

Has Piston Ports Instead Of Valves; Built-In Blower

A NEW aircraft engine rated at 200 hp has been developed by the Research Division of General Motors Corp., C. E. Wilson, president, informed AMERICAN AVIATION today. He said that market potential and production studies on the new engine are now being conducted by the Buick Motor Division of the corporation.

Designed for installation in private aircraft of the future, the new engine is an outgrowth of studies started eight years ago—and subsequent war contracts—in connection with the development of military robot planes. It has undergone extensive flight testing for six years and is now considered ready to make an important contribution to aircraft development.

The new engine is a radial type having four cylinders and operates on the two-cycle principle. Its unique feature is that a supercharging blower is used to increase performance and power reserve for take-off and altitude. There are no valves, this function being performed by the pistons themselves. Although piston displacement is only 250 cu. in.—the size of an automobile engine—it develops normally 200 hp with a high safety factor, and the weight dry is only 275 lbs. As far as can be determined, it is the only small engine having liquid cooling, and yet may be installed for the same weight as an air cooled engine. It is only 35 in. in diameter.



From "Aircraft Eng. of the World"
GM Research X-250

Oil consumption is extremely low, a single quart serving for six hours running. Fuel consumption is comparable to engines of similar power—about 13 gallons an hour using 91 octane gasoline.

Tests have shown that the added cost and weight of a variable pitch propeller can be eliminated through the use of this boosted two-cycle principle.

The design of the new engine is greatly simplified and the number of parts reduced, thereby permitting a rugged type of mechanism which may be expected to bring field maintenance costs far below the minimum for present engines of the four-cycle type.

However, robot bomb engine contracts are being continued at the River Rouge plant.

Chrysler Corporation: Contracts for B-29 and B-32 aircraft engines at the Chicago plants were terminated, and it is expected that the work in progress there will be completed in the very near future.

Consolidated-Vultee: The B-32, originally developed as possible insurance against the tactical or production failure of the B-29, has been cancelled out, resulting in immediate personnel reductions. However, experimental work is to continue on the B-36, the C-90 and a restricted plane on which no data is available for publication.

Republic Aviation: Contract cancellations will close the Evansville, Indiana plant but the company hopes to retain about 50 percent of its 10,000 employees. All experimental contracts have been retained and the company will continue its development of a new type of aircraft for the Army Air Forces. The company is also planning to enter the commercial transport and private plane markets. Reported cancellations total \$242,000,000.

Grumman Aircraft Engineering: Schedules have been reduced, but the company will continue with its production of Wildcats, Hellcats and the new twin-engine F7F Tiger cat for the Navy. As in pre-war days, it plans to build commercial and private amphibians. Cancellations reported thus far amount to \$240,000,000.

Lockheed Aircraft Corporation: Cancellations and cutbacks in contracts have closed the sub-assembly plants at Fresno, Santa Barbara and Pomona, which had been working on P-38s and PV-2s. All 750 employees there were discharged. War contracts cancelled thus far are reported at \$191,255,794.

Eastern Aircraft Division—General Motors: Cancellation of Navy aircraft contracts will result in this facility being eliminated as a manufacturing unit. The Linden, Trenton

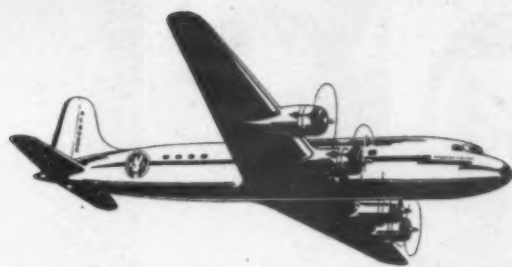
and Bloomfield plants will be reconverted to the assembly of passenger cars, trucks and Fisher bodies. Approximately one-half of the 10,000 employees are expected to be retained.

Columbia Aircraft Corporation: This plant plans to continue operations by manufacturing a commercial utility airplane.

United Aircraft Corporation: With an estimated \$633,000,000 of war contracts cancelled, this company will reduce operations and personnel drastically. About 20,000 employees in the Hartford plants of Pratt & Whitney, Hamilton Standard Propellers and subcontractors will be discharged, but some 13,000 workers at the Chance-Vought Bridgeport plants were instructed to return to work on August 27 unless notified to the contrary. All plants closed down for ten days for inventory-taking purposes, and to give time to work out a substantially reduced production schedule. The Kansas City Pratt & Whitney engine plant will probably be closed indefinitely there, and 17,000 employees there forced to seek employment elsewhere. All Government contracts have been terminated there and future Kansas City operations will be limited strictly to those necessary to final liquidation.

Air Mail Service Resumed To Four Philippine Islands

Air mail service will be resumed at once to the islands of Leyte, Luzon (including Manila City), Mindoro, and Samar in the Philippines. For the present service will be limited to articles not exceeding two ounces in weight. The air mail of postage from continental U. S. to the Philippine Islands is 50c a half-ounce.



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(El Salvador)

PICAO Aims Toward Early Activation of '5 Freedoms'

Edward Warner Named Head of Interim Council

By KENNETH E. ALLEN

POINTED TOWARD a goal of bringing all five freedoms of the Chicago convention into activation as quickly as possible, the Provisional International Civil Aviation Organization set itself up as a working organization in Montreal last fortnight.

Beginning its sessions Aug. 15, PICAO elected Edward Warner, U. S. delegate, as president of the Interim Council, and named Albert Roper as secretary general. Warner will resign as vice chairman of the Civil Aeronautics Board to accept the new post.

Elected to serve with Warner were Dr. F. H. Copes Van Hasselt, Netherlands delegate, first vice president; Dr. Chang Kia-NGau, Chinese delegate, second vice president, and Guillermo Eliseo Suarez, Colombian delegate, third vice president.

Bulk of the initial plenary session was given over to organizational matters, after council members reached substantial agreement that they should remain in session on a continuous basis, probably beginning about Oct. 1.

Gerald Brophy was named U. S. delegate to replace Warner on the council.

Brophy was released from the AAF to accept the appointment. He served as a colonel in charge of the international branch of the AAF, and prior to his entry into the Army was a member of the law firm of Chadbourne, Wallace, Parke and Whiteside.

Warner said that Roper would continue to serve as secretary-general of the International Commission for Air Navigation, which held its first plenary session since the war in London Aug. 21-25. Roper's holding the two positions will more closely tie together the two organizations.

Warner said that ICAN would not give consideration to becoming a part of PICAO at this time, because of the temporary nature of the latter organization. However, as soon as the permanent convention is ratified by the signatory nations, ICAN will be absorbed by the international body.

The council named three temporary committees on organization, finance and personnel to push toward completion of a working body, and also set up an *ad hoc* committee to formulate a plan for creation of the committees on air navigation and air transport. A third permanent committee to be named is that on the permanent convention.

Correlation of the action of these tem-

Named to Serve on Council

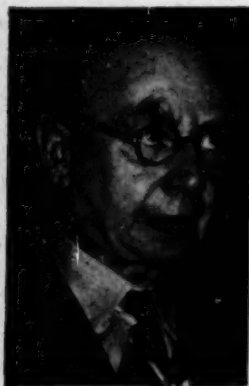
Following is the list of delegates named to serve on the Interim Council of the Provisional International Civil Aviation Organization:

Australia, A. R. McComb; Belgium, Jean Verhaegen; Brazil, Cesar Silvera Grillo; Canada, A. C. McKim; Chile, Col. A. Meneses; China, Dr. Chiang Kia-NGau; Colombia, Dr. Guillermo Eliseo Suarez; Czechoslovakia, Dr. Jan Reisser; Egypt, Hussein Roushdy; El Salvador, Francisco Parrago Orozco; France, Henri Bouche; India, Sir Guranath Bewoor; Iraq, Ali Fuad; Netherlands, Dr. F. H. Copes Van Hasselt; Norway, Alf Heum; Peru, Col. Cesar Alvarez; Tuhkey, Orhan H. Erol; United Kingdom, Sir Frederick Bowhill; United States, Gerald B. Brophy.

Mexico, a member of the council, had not named a delegate as the initial PICAO sessions closed in Montreal.

porary committees served to slow down the workings of the council as a whole, but it was pointed out that the hiring of personnel remained the immediate issue of importance. It was suggested that Oct. 1 be set as a deadline for applications for employment.

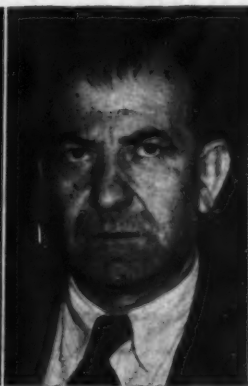
Although the organization chart had not been made public last fortnight, it was mentioned by Anson McKim, Canadian delegate and temporary chairman of the council, that some 140 persons would be employed.



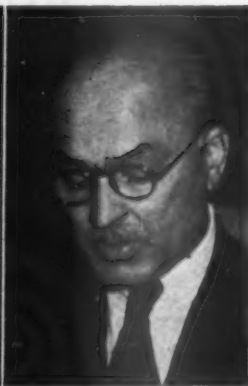
Sir Frederick Bowhill
(United Kingdom)



Guillermo E. Suarez
(Colombia)



Orhan H. Erol
(Turkey)

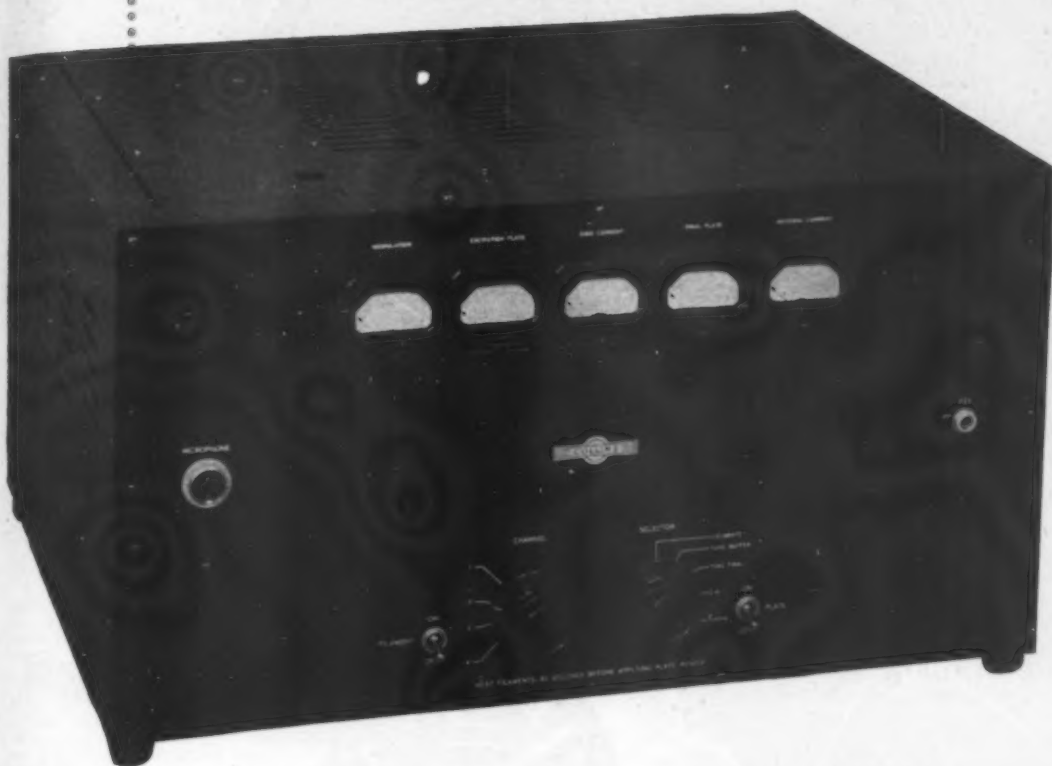


Sir Guranath Bewoor
(India)



Col. Gerald B. Brophy
(United States)

COLLINS 32RA RADIO TRANSMITTER*



A deservedly popular 50 watter....

THE COLLINS 32RA* was introduced in 1939 as a quality designed, quality built radio communication transmitter, broadly adapted to most applications within its power and frequency scope.

It, or its d-c version—the 32RB†—was immediately put into service by airlines for control towers, by oil pipelines for emergency systems, by fishing companies for fleet control, and by other widely different types of industrial users.

It was found to be rugged, simple to operate, easy to service, and so thoroughly and universally satisfactory that a rising commercial demand was halted

only by the war. During the entire war the Armed Forces have employed thousands of these transmitters. A typical use has been that of control towers on air training fields throughout the country.

Of the several up-to-the-minute transmitters which Collins has ready for its civilian customers as Government requirements are cut back, this one represents a type of which limited quantities are now being manufactured for essential civilian uses. If you would like specifications and design data, write us for new, illustrated bulletin. Collins Radio Company, Cedar Rapids, Iowa; 11 West 42nd Street, New York 18, N. Y.



*COLLINS 32RA—Power source: 115 volts alternating current. Power output, 50 watts phone; 75 watts CW. Frequency range, 1.5 to 15 mc. Four frequencies instantly selected by panel control.

†COLLINS 32RB—Power source: 12, 24, 32 or 110 volts direct current. Dynamotor, self contained. Otherwise identical with 32RA.

..... IN RADIO COMMUNICATIONS, IT'S ...

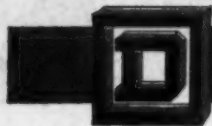




PATTERN FOR TOMORROW'S AIRLINES. Along with good planes and pilots, the new regional and local airlines starting in business will need the best and most complete instrument equipment they can buy. Instruments are the backbone of safe operation . . . the kind of operation our pioneer airlines have taught the nation to expect in scheduled air transportation. Instruments also have everything to do with regularity of service, and this regularity of service—around the clock, around the calendar—means not only service to the public but the fullest and most economical use of the new air carrier's investment in equipment. Tomorrow's airlines will find Kollsman accuracy and dependability important aids to the safety, regularity and economy of their operations.

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Shakeup in Field Offices Of CAA Follows Investigation

Two Regional Officials Charged With Malfeasance

IRRREGULARITY in the enforcement of Civil Air Regulations, and alleged graft in the issuance of pilot licenses has resulted in a shake-up of considerable proportions in the field offices of the Civil Aeronautics Administration. The investigation is being continued and may have repercussions in many CAA circles.

The investigation conducted by the Department of Commerce at the request of Administrator T. P. Wright already has resulted in charging two regional officials with malfeasance, the request for the resignation of two others and the transfer of three employees to other posts. Violations are said to have centered largely in the New York area, it was stated.

As a result of the investigation, Wright has announced a seven-point program designed to insure strict and impartial enforcement of the Civil Air Regulations.

Wright announced that the charges involving the seven employees include:

1. Improper issuance of airmen's certificates. For example, there were instances in which it was alleged that commercial certificates and horsepower ratings were issued without flight tests of the applicants.

2. Discrimination in enforcement of CAA regulations. One flight school was denied CAA approval on the ground that it lacked certain equipment required by CAA regulations, but a rival school which lacked the equipment is alleged to have received CAA approval.

3. Irregularities in conducting CAA written examinations; it was charged that collusion among participants was permitted, in some cases, and that violations were not filed against applicants found cheating. Written answers to examination questions are alleged to have been changed so that questions incorrectly answered would receive passing grades.

4. Lack of uniformity in enforcing CAA regulations, acceptance of gratuities, and—specifically—issuance of a flight instructor's rating to an applicant who had twice been found unqualified in another CAA region.

30 Days to Answer

"The persons against whom these charges have been filed and others who have been asked to resign, have 30 days in which to state their side of the case," Wright said. "Until their answers have been studied and passed upon, I do not think it would be proper to make known their names."

Wright's seven point program for strict and impartial enforcement is as follows:

1. Frequent revision of questions contained in the written examination questions.

2. Stringent application of the law which prohibits unauthorized persons from receiving advance copies of examination questions. The Regional Administrators will be held responsible personally for taking the necessary precautions.

3. Employees of the CAA are prohibited from holding any bonds, stocks, or proprietary interest in any civil aviation enterprise which by virtue of their positions in CAA they may be able to affect in one way or another.

4. It is reemphasized to all employees of CAA that the acceptance of gratuities and gifts of material value will endanger their continued employment.

5. Employees of the CAA are prohibited from engaging in the business of purchasing

and reselling airplanes, airplane parts and accessories.

6. Strict adherence to the present prohibition against personal use of official airplanes and automobiles.

7. Rotation of inspectors in the General Inspection Service on an intra or inter-regional basis.

Wright notified CAA personnel that in emphasizing strict enforcement of regulations they should not become literal-minded martinets.

"You are public servants charged with the promotion of civil aviation," he said, "and should be cooperative in your dealings with the public to the fullest extent consistent with the protection of public safety."

A few months after Wright took office, he made a field trip and, based on irregularities found in one Region, launched a preliminary inquiry. His findings prompted him to ask the Secretary of Commerce to make a full-fledged investigation.

Some Complaints from Schools

Some of the original complaints, it is understood, came from flight schools who had been made aware of unsavory conditions when their students attempted to obtain check flights from regional inspectors preparatory to receiving pilot licenses.

It was pointed out that in some cases, the inspector would give a variety of excuses, including fatigue, to forestall making the check flight. Some of these students it was said had traveled many miles for check flights. It was here that money is said to have passed hands in order that the check flight might be negotiated.

One flight school official said that he felt this situation, which is said to have prevailed for many years, caused the Army to deal directly with flight schools when it set up its civilian pilot training program preparatory to this country's entry into the war. CAA was by-passed because of these internal conditions, this official believed.

A Commerce Department official said that two pilots had been killed in accidents recently where an investigation had revealed that they had not been properly trained, although regional inspectors had issued them pilot certificates.

Following revelation of Wright's charges, Sen. Harold H. Burton, (R., Ohio) wrote the Senate Commerce Committee asking for a full investigation, including relationships between flight training schools and cadets trained at government expense.

TWA Officials to Make North Atlantic Survey

High officials of TWA are planning to leave shortly on a survey trip over the carrier's new route across the North Atlantic preparatory to the inauguration of regular international services at some future date.

Among those planning to make the trip are T. B. Wilson, chairman of the Board, Otis F. Bryan, vice president in charge of war projects and his assistant, D. E. Midgley, Constantine Stackelberg and several technical assistants.

Transport Association Rapped by Tipton

Stuart G. Tipton, acting president of the Air Transport Association, told the Aviation Section of the New York Board of Trade Aug. 24, that the proposition put forward by the Transportation Association of America for an integrated transportation policy is designed to eliminate competition in the transportation field, particularly between the major forms of transportation: railroads, airlines, busses, trucks, waterways and pipe lines.

"In its stead," Tipton declared "there would be set up an 'integrated' system by which the airplane, the steamship, and the rail coach would contentedly graze in the same pasture, their security guaranteed, with not a worry in the world."

One all-wise superman government agency, a combination of the Interstate Commerce Commission and the Civil Aeronautics Administration, would regulate all transportation, regardless of the amount of technical knowledge required for each of the half dozen different forms of locomotion, he stated.

"We of aviation do not want to submit ourselves to such an all-seeing master. Ours is an industry requiring intensive technical knowledge and an abundance of 'know-how.' We do not move on rails and over right-of-way. We do not twist along or around mountains and glide through tunnels. We do not ride the ocean waves. Our routes lie through space. Our industry bears testimony that America is still a young country, not an old and completely filled one," he stated.

Tipton said integration means monopoly and monopoly might ultimately lead to government ownership.

"I can see no better way of getting Government ownership, and quickly, than by creating eight or nine great transportation monopolies over which the general public cannot possibly have any control," Tipton declared. "The development of those monopolies seems clear to me. The passengers and shippers would suffer just so long under the treatment they received from the particular monopoly concerned and then there would arise a great clamor for Government ownership. And it would be a proper one, for under those circumstances it would only be through Government ownership that the traveling and shipping public could expect to get adequate service at reasonable rates."

Quoted (Senator) Truman

Tipton quoted from a speech made by President Truman, then Senator Truman, in Baltimore in which he went on record as definitely opposed to integration and contended that the proposal implies the adoption of the cartel theory of distributing the fruits to the various units involved.

Charging that partial integration recommended by the shipping interests is as bad as total integration, Tipton labeled as fallacious the view that if steamship companies are not permitted to participate in air transportation, the merchant marine will be driven from the seven seas.

"Even if it were assumed that the shipping advocates were right and that the merchant marine was to be destroyed, that does not seem to be an adequate reason for carrying air transportation down with it," he asserted.

Common Sense from Oliver Stewart

The following is reprinted from the column, "Air Eddies," appearing in the British publication, *The Tatler and Bystander*, some months ago. The column is written by Oliver Stewart, editor of the magazine, *Aeronautics*, which, although not circulated as widely in USA as is *Flight* and *The Aeroplane*, is one of the top British aviation magazines. Stewart has risen in recent years to become one of Britain's ablest, fairest and best-informed air observers. The following makes fine sense:

"More than ever, now that that great friend of Britain, F. D. Roosevelt, has gone, is it necessary to take steps to ensure that amicable relations are maintained between Great Britain and the United States. There can be little doubt that a source of danger to these relations lies in aviation. Whether Britain fears America's commercial air power or not, she certainly acts as if she did. Hardly a reference is made to Britain's future in commercial flying without some allusion to American competition. Often hard things are said on both sides.

"Now I do not think that antagonism is caused by frank speaking. I like to read American critics who tear us to pieces and expose our faults. There is something stimulating in knowing just how detestable some of our habits can seem. And I do not like the Americans any less for their frankness. Nor do I think that the Americans like us any less when we tell them frankly what we think about them. There can be very hard hitting on both sides and no loss of respect or friendship. But let us beware how we nag.

"I feel that we tend to nag about United States' aircraft. We tend to get annoyed that America is so much better supplied with good machines for transport than we are ourselves and then to substitute nagging for criticism. If we do not like the DC-4, or the Constellation or any other machine, let us say so and state why. But do not let us decry it simply because we ourselves are not the makers. Similarly there is no objection to our criticizing the way the American run their air lines. But there is the strongest objection to nagging at the American lines simply because they are more active than any lines we possess.

"There is equally the strongest objection to trying to wangle the Americans out of their position in the air by diplomatic means, by conferences and agreements. They are certainly going to be very strong competitors to us in civil air transport. Nurtured in the hard but efficient school of competition—45 per cent domestic air lines in America are now running under competitive conditions—they will, I believe, make rings around our laboured, form-filling, inhibited government monopolies. But that is our own fault and not the fault of the Americans. Let us criticize fully and, if you like, fiercely when we have a point of criticism; but let us avoid nagging and whining. If we stick to that rule British and American aviation will not fall out."

**Measure the South
in MINUTES**

Delta
AIR LINES

SIXTEEN YEARS OF AIR LINE SERVICE

General Offices:
ATLANTA, Ga.

The advertisement features a large pocket watch on the left, with its hands pointing to approximately 10:10. To the right of the watch is a map of the Southern United States, showing major cities and flight routes. A hand is shown pointing to a specific location on the map. The Delta Air Lines logo is prominently displayed in the center, with the tagline "SIXTEEN YEARS OF AIR LINE SERVICE" at the bottom.

ATC Will Continue Priority System On Greatly Reduced Basis

The priority system for air travel will be continued indefinitely but on a greatly reduced basis, Col. Ray Ireland, deputy chief of the Air Transport Command, has revealed.

Only one class of priority is to be maintained and this will deal with travel urgently related to winding up war activities. ATC, Col. Ireland stated, is working on a plan which seeks to reduce the number of passenger and cargo priorities to the minimum and greatly simplify the procedures involved.

Travel of military personnel, such as soldiers returning from battle areas who will be redeployed to occupation zones and emergency travel, particularly where it involves soldiers, will probably be continued although this entire question will be the subject of continued study in the light of subsequent developments relating to the overall transportation problem.

When the new plan is put in operation, Col. Ireland estimates that total, overall priority travel may be reduced as low as 20% of the total airline travel. Today he estimates that overall priority travel is around 35 to 40%, with the rate as high as 90% on certain major routes which are definitely linked up with former war zones.

In discussions relating to the modified plan, the military ruled out travel incident to reconversion as justifying priority treatment. The consensus in Army circles is to do away with the priority system as soon as wartime necessities permit.

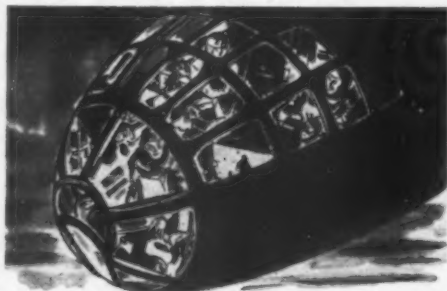
The airlines are looking forward to the day when the priority system will be abolished entirely so that they may return to a basis of "first come, first served" in their relations with the traveling public.

U. S. Delegation to Radio Conference in Rio Named

Composition of the U. S. delegation to the Third Inter-American Radio Conference, to be held at Rio de Janeiro beginning Sept. 3, has been announced by the State Department.

U. S. Delegate Adolf A. Berle, Ambassador to Brazil, will be accompanied by Loring B. Andrews, Radio Division of the Office of Inter-American Affairs; Col. Theodore L. Bartlett, Air Communications Office, AAF; Robert Burton, Utilization Section, International Information Division; J. H. Delinger, Radio Section, National Bureau of Standards; Ralph L. Higgs, meteorologist, U. S. Weather Bureau; Arthur L. Lebel, chief of Communications Section of the State Department's Aviation Division; Commander Paul D. Miles, Office of Chief of Naval Operations, Navy Department; Harvey B. Otterman, State Department's Telecommunications Division; Col. A. G. Simson, Chief of Communication Liaison Branch, Office of the Chief Signal Officer, War Department; Lloyd H. Simpson, Radio Communications Coordinator, CAA; Commodore E. M. Webster, Chief Communications Officer, U. S. Coast Guard. From the Federal Communications Commission will come Rosel H. Hyde, general counsel; Ray C. Wakefield, commissioner; and Marion H. Woodward, Chief of the International Division. Listed as Secretary is Hubert M. Curry, attache in charge of telecommunications, U. S. Embassy, Habana, Cuba.

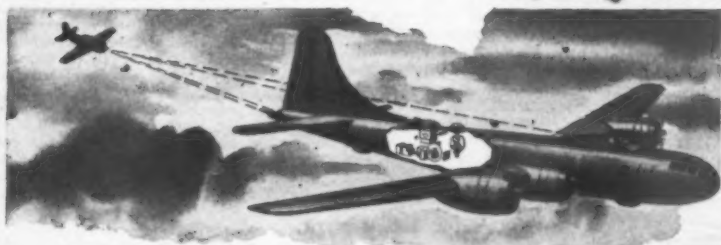
Stars in the sky.... the Superfortress



GREENHOUSE NOSE affords excellent vision for bombardier, pilot, co-pilot. Pilot's job is lightened by flight engineer, who handles main instrument panel. Extra power and range of Chevron Aviation Gasoline makes his job easier, too.



ON LONG MISSIONS Superfort crews can "hit the sack" in these bunks. Hatch at right opens on unpressurized sections of high-flying B-29. Development of high-octane super fuels like Chevron Aviation Gasoline have vastly increased ceiling of warplanes.



BATTLESHIP FIRE CONTROL of B-29 permits single gunner to concentrate fire of several turrets on enemy plane. Superfort carries twin 50-cal. machine guns in five remote control turrets, plus 20 mm. cannon in tail stinger. For the dependable power required in test-flying and delivering these 60-ton sky giants, Boeing's West Coast plant selects Chevron Aviation Gasoline. Chevron is the choice of many other West Coast plane plants and airlines, too.



ADAPTED to the requirements of light engines, Chevron Aviation Gasoline gives private flyers an extra margin of power, range, dependability. Try Chevron Aviation Gasoline—it will make your plane, too, a star in the sky.



IATA to Absorb International Traffic Group

Older Organization Founded At The Hague in 1919

THE International Air Transport Association (IATA) will absorb the International Air Traffic Association, also known as IATA, probably some time this month when the traffic group is expected to meet in London to wind up its affairs and transfer its records to the newer organization.

The newer IATA was organized last April 19 at a conference of airline officials in Habana. The meeting was called to consider a course of action in view of the results of the Chicago Conference.

The traffic association was organized in 1919 at The Hague and remained the leading international organization of airline operators until its activities were suspended in 1939 by the outbreak of war in Europe. It was primarily a European group in its early years, but later acquired other members, particularly from the United States, India, and Africa.

The executive committee of the IATA, elected at Habana, held its first meeting from July 30 to August 2 in Paris at the offices of Air France. Dr. Lawrence C. Tomba, formerly a member of the Secretariat of the League of Nations, was appointed acting secretary and treasurer of the committee and John C. Cooper of Pan American Airways was named committee chairman. Dr. Tomba has announced that the executive committee will meet again in Montreal on October 10, five days prior to the first general meeting of the association since its organization in Habana. Over 200 airline officials are expected to attend the general meeting.



Plesman Liberated—Officials of KLM Royal Dutch Airlines greet their president, Albert Plesman, on his arrival at Hato Airport, Curacao. Left to right: Plesman; Dr. D. A. IJsselstijn, general manager of KLM's West Indies Section; Capt. J. J. van Balkom, operations manager. Plesman, one of the pioneers of commercial aviation, was liberated from Nazi-occupied territory last April when Allied troops took Enschede. The same month he was elected a member of the executive committee of IATA.

The chairman of the overall meeting has not been announced but it will probably be H. J. Symington, president of Trans-Canada Air Lines and temporary president of IATA. The title of president is honorary and does not carry membership on the executive committee.

Headquarters of the IATA have been established in Montreal. Secretary-treasurer Tomba, although not a delegate, attended the first meeting of the Council of the Provisional International Civil Aviation Organization (PICAO) which convened August 15 in the same city.

Seeks to Revive S. A. Routes

Col. Paul Vachet, director of Air France in South America, is negotiating with the Brazilian Government for re-establishment of the airline's services which were suspended in 1940 following the invasion of France. The company has the personnel and the equipment to resume its former route from Paris to Santiago, Chile, with stopovers in Dakar, Recife, Rio de Janeiro, Sao Paulo, Montevideo, Buenos Aires and Mendoza. Vachet is still seeking to persuade the Brazilian Government to return Air France aircraft and installations that were confiscated. Vachet states that it is not necessary to negotiate new concessions with the countries through which Air France would fly. These governments took official recognition of the fact that services were suspended for reasons of force majeure, and that existing concessions would be regarded as merely suspended.

New English-Egyptian Company

After long negotiations between the British and Egyptian governments and between BOAC and Miler airlines, agreement has finally been reached on the formation of a new air transport company, to be known as Egyptian Airways. The company will be initially capitalized at £250,000 (\$1,000,000), and will operate subsidised services between Britain and Egypt, with Britain paying the larger part of the subsidy. The new airline will have three British and four Egyptian directors, with one of the latter as chairman, and its aircraft will carry the Egyptian flag.

Canada's Wartime Airport Boom

At least 140 new airports were constructed in Canada and 316 existing airports expanded by the Department of Transport alone to meet the various demands of the war: air training, home and hemisphere defense, international transportation and aircraft ferrying. The total area of runways constructed in these new and enlarged fields approximates a two-lane highway more than 2900 miles long. The value of electrical lighting, power and communication services installed exceeds \$10,000,000.

New Soviet-Rumanian Airline

A Soviet-Rumanian Convention has been signed at the Ministry of Communications in Bucharest, providing for the establishment of a new joint air transport company to be known as "Sovron Transport." The company's head office will be located in Bucharest.

BOAC Schedules Speeded Up

England is now only 63 hours from Australia. Inauguration of a faster Lancaster service by the British Overseas Airways Corporation has taken nine hours off the previous time required for the 12,000 miles between Hurn and Sydney. Frequency has been increased from one to two flights per week in each direction. BOAC has also started using Avro Yorks instead of DC-3s on the United Kingdom-Karachi route, reducing the time from 33 to 31 hours.

As of May 31, 1945, the total fleet of BOAC consisted of 174 aircraft, of which 95 were of



Complete Test Flights—Carl Ljungberg (left),

director general of the Royal Board of Civil Aviation, the Swedish counterpart of the CAB, arrives in New York on the last of a series of transatlantic test flights by the Swedish Intercontinental Airlines (SILA) prior to inauguration of regular service. Ljungberg and Captain Tage Joneberg (center), chief of the Board's traffic division, are shown being greeted by Tore Nilert, U. S. representative of SILA.

American make. Among the American aircraft were 56 DC-3s—nearly a third of the entire fleet—19 Lodestars and 12 Liberators. Of the 79 British aircraft, 24 were Sunderlands and 14 were Short Empire flying-boats. Since that date, 81 additional aircraft have been allotted to BOAC, including 31 Lancasters, 25 Yorks, and 5 de Havilland 88Bs (Dominies).

Canada Gets Airfields From U. S.

Airports at Churchill, Southampton Island and The Pas, built by U. S. Army Air Forces for the Northeast Staging Route, are being taken over by Canada's Transport Department, in accordance with arrangements between the two governments, and plans for their disposal have been announced. The Transport Department will operate the radio and meteorological services at all three fields, and airport facilities will be kept up at The Pas and Churchill. Little traffic, however, is expected at Southampton Island, so it will have only a caretaker.

No New Fokkers for a While

The Fokker aircraft factories at Amsterdam that were stripped of machinery and equipment by the Germans should be re-equipped by requisitioning machines and tools from German Fokker plants, according to J. E. van Tijen, managing director of the company. Sufficient personnel is available to start production immediately, if the Allies allow the Dutch to re-equip the plants in this way. But this will take time, so meanwhile officials are trying to restore some of the plants sufficiently to permit work on aircraft maintenance and repair.

From the beginning of the occupation, the Germans tried to win over Fokker personnel in order to speed up production of aircraft for the Luftwaffe. But these efforts met with stubborn resistance by the workers, who managed to cut production by as much as 80%, while continuing to work in the drafting rooms on postwar commercial designs.

Freight Service to Brazil

The Brazilian Ministry of Aviation has granted Pan American Airways authorization to establish an air freight service between the U. S. and Brazil, with stops at Fortaleza and Rio de Janeiro. The route may be operated once a week. Pan American is planning a similar service to Argentina.

WHY THE *Martin Mars* IS TOPS AMONG TRANSPORTS!

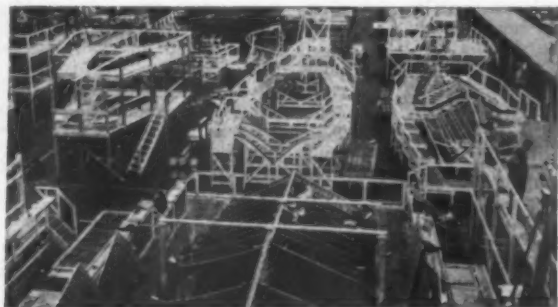


BIG BOW of a JRM Mars gives idea of their vast size. Great 120-foot hulls contain 32 ports, 17 hatches, including the 8 by 7½ ft. cargo doors. Wing spread exceeds 200 ft.



SKY GIANT Martin Mars has carried useful loads of over 35,000 lbs. . . . flew 4,227 miles non-stop with 13,000 lbs. of cargo . . . operates at 15c per ton-mile. Her new sister-ships will operate at less than 10c.

WHY is the Martin Mars America's No. 1 transport plane? Let's look at the record! In her first 15 months of service the Mars carried 3,000,000 lbs. of cargo, nearly 2500 passengers, flew the equivalent of 10 times around the earth at the equator. During one month alone, she made 20 trips between Pearl Harbor and California for a utilization of 9.4 hours per day.



PUSHING PRODUCTION of these big flying ships, to meet Navy demands for fast transpacific service, Martin now has 70 manufacturers in 12 states turning out JRM sub-assemblies.



LUXURIOUS LOUNGE of postwar Mars. No cramped seats or narrow aisles here! Passengers will stroll about, visit bar, enjoy hot meals, sleep in private compartments.

NEW MARS TRANSPORTS

On the basis of this outstanding performance, the Naval Air Transport Service ordered a fleet of these highly efficient cargo carriers. Bigger, faster than the original Mars, these new transports will rush supplies to Pacific outposts at a rate of approximately 3000 ton-miles per hour . . . will operate at less than 10c per ton-mile . . . will be quickly convertible from cargo carriers to hospital ships accommodating 84 litter cases and 25 attendants or to transports seating 132 passengers. These huge 82-ton flying ships will soon be entering service.

COMMERCIAL VERSIONS

Commercial versions of the new Mars, offering great freight facilities and unsurpassed luxury to tomorrow's transoceanic travelers, are ready to build as soon as war conditions permit. With Martin plants tooled for and in quantity production of Mars flying ships, delivery of commercial models will be prompt.

THE GLENN L. MARTIN CO., BALTIMORE 3, MD.
THE GLENN L. MARTIN-NEBRASKA CO., OMAHA

Martin
AIRCRAFT

Builders of Dependable Aircraft Since 1909



Expansion of Turkish Air Lines Planned

Devlet Hava Yollari Meydani, the Turkish State Air Lines, plans to inaugurate 12-months service this year. Heretofore, commercial air services have had to be suspended during the winter.

The following statistics on the eight operating months of 1944 and 1943 have recently been released:

	1944	1943
Revenue passenger-miles	434,916	255,000
Mail, newspapers, baggage (pounds)	252,450	155,540

Included in these figures are an unspecified number of charter flights. There is no cargo service, and not more than one per cent of the passenger-miles is non-revenue.

DHY is operated by a department of the Ministry of Communications, with Ferruh Sahinbas as director general. Sahinbas visited this country last winter in connection with his company's application for surplus aircraft. Other personnel include 19 pilots, 28 wireless operators and 24 mechanics.

At present five routes are operated by the company as follows:

Ankara-Istanbul—Daily except Sunday
Ankara-Konya-Adana—Daily except Sunday
Ankara-Silvas-Erzurum—Three times a week
Ankara-Elaziz-Van—Three times a week
Afyon-Antalya—Three times a week

It is hoped that by the end of 1945 three additional routes will be in operation: Ankara-Samsun, Adana-Iscenderun, and a route connecting Black Sea, Aegean Sea and Mediterranean ports. Tentatively this last service would touch at Trabzon, Samsun, Eregli, Istanbul, Canakkale, Izmir, Fethiye, Antalya, Anamur and Mersin.

In addition to the services of the Turkish airline, the British Overseas Airways Corporation operates twice weekly for passengers and mail from Cairo to Latakia (Cyprus), Ankara and Istanbul, and the U. S. Air Transport Command offers a similar service twice a week from Cairo to Lydda (Palestine), Beirut (Lebanon), Ankara and Istanbul. It is reported that Swedish and French airlines have

E. A. Robinson of Tasman Joins Whites Aviation

E. A. Robinson, New Zealand resident manager of Tasman Empire Airways for the past 2½ years, has left that airline to



Robinson

join Whites Aviation Ltd., an aeronautical development company with headquarters in Auckland.

Whites Aviation plans to promote the growth of all aspects of New Zealand aviation. One of its goals is the early revival and expansion of the Aero Club movement and the increased use of lightplanes for personal and charter use. The organization may also establish cargo operations to isolated districts, but will not seek to provide scheduled airline services as it considers this phase adequately handled by present operators.

entered negotiations with the Turkish government to extend their services to Turkey—the French to add Istanbul to their Mediterranean route, and the Swedish to operate to Istanbul by way of Warsaw and Bucharest.

The Turkish government recently revealed that it has applied to the U. S. Surplus Property Board for 10 DC-3-type aircraft. It was announced on January 2, 1945 that three of these had been allocated. DHY has never previously used American equipment, but has been supplied by either the British or the Germans. The company says, however, that the de Havillands purchased from Great Britain are already over-age, and that it is impossible to obtain spare parts for these or for the German Junkers it used before and during the war. Therefore it needs 10 new transports in order to continue service on domestic routes, to say nothing of equipment for its new projects. For the proposed Black Sea-Mediterranean Sea service, the company is considering the use of seaplanes. At present DHY is operating 13 de Havilland "Dragon Rapides" and "Dominies," three of which were acquired in 1944.

New Burnelli 'Wing' Passes Flight Tests

Officials of Canadian Car and Foundry Co., Ltd., Montreal, said last fortnight that initial tests on the CBY-3, a new version of the Burnelli "flying wing", had more than exceeded specification expectations.

The aircraft is being built for TACA Airways as a combination cargo-passenger transport. Company officials said they had an order for 10 of the aircraft if it proves out. Initial tests have been without payload weights.

The prototype has been under test for the past month, with Clyde Pangborn as chief test pilot. The CBY-3 is an all-metal, high-wing transport, powered by two Pratt & Whitney 1200 hp. engines. The fuselage, which contributes about 10% to the lift, is 20 feet wide. Overall span is 80 feet.

One safety feature of the CBY-3 is incorporated in the landing gear and hydraulic braking system. The conventional gear is equipped with dual wheels throughout, a factor which alleviates the danger from a tire blowout on landing or takeoff. The hydraulic system, likewise, is dual, so that if one system fails to function, the other will handle braking.

Company officials said that TACA has specifically requested the conventional landing gear, primarily because of short runways on Central and South American airports. Conversion to a tri-cycle gear would not entail extensive modification, however, it was pointed out.

Although original specifications called for a maximum speed of 200 mph., company officials said the aircraft had consistently approached 220 mph., in flight tests. Cruising speed is 185 mph., with a payload of three and one half tons, and a range of 2000 miles.

The CBY-3 is built to handle bulky freight, with a cargo compartment 20 feet long and six feet high, which is accessible through two doors at the ends of the compartment. It will carry 24 passengers.

British Aircraft to Turkey

It has been reported that material for 80 Miles "Magisters" is enroute to Turkey from Britain. These aircraft will be assembled in 1946 for use by the Turkish Air League, a semi-official organization designed to foster the growth of air-mindedness. The League has a considerable income, derived from a tax on all salaries and wages and from its lottery, the only one authorized in Turkey. Its energies are devoted mainly to the purchase of aircraft for the air force and for flying schools. Donations are solicited from every city and town, and many municipalities have raised sufficient money for a complete machine. Each aircraft so added to the nation's air fleet bears the name of the town from which the purchase price was received.

Growth of Sabena-Africa

The great expansion in African operations of SABENA, the Belgian airline, during the war is revealed in the following statistics (all figures are round numbers):

	1944	1939
Route miles operated	19,800	3,400
Miles flown	1,860,000	148,800
Passengers	12,000	2,000
Load factor	90%	72%





New World Symphony

Many influences would determine the form of a Symphony symbolising post-war Britain.

The influences of Industry would be considerable and co-incidental with the progressive thoughts and endeavours of the individual.

And for the parts thus scored, important commercial undertakings are, so to speak, potential members of the orchestra.

ROTOL LTD. is among these, with a selection of products of proved value in the restoration of British trade at home and abroad.

ROTOL AUXILIARY GENERATING PLANT • ROTOL AIR-CONDITIONING FOR AIRCRAFT
ROTOL MARINECRAFT PROPELLERS • ROTOL AIRCRAFT PROPELLERS
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RA197

Airport Bills May Get Priority in Congress

Sponsors Expected to Press for Fall Action

By GERARD B. DOBLEN

AIRPORT LEGISLATION may win a near-top position on the agenda of Congress when it returns Sept. 5 from a recess which was cut short by the end of the war.

Because federal aid airports bills in both House and Senate have passed through the hearing stages and offer something concrete in the way of a constructive public works program designed to take up the slack in employment, it appears reasonably certain that these bills will be in line for early Congressional consideration.

The McCarran Airport bill S. 2 already has had two hours debate in the Senate and it is understood that an agreement has been reached by Sen. Pat McCarran (D., Nev.) the bill's author and Majority Leader Alben W. Barkley (D., Ky.) for its consideration early in September.

On the House side, the Lea bill H. R. 3170 is on the House calendar and Elton J. Layton, clerk of the House Interstate and Foreign Commerce committee, said Chairman Clarence F. Lea (D., Calif.) would ask the House Rules committee for a rule to permit its consideration soon after Congress convenes.

The Congress will focus attention

largely on questions pertaining to re-conversion, surplus disposal, veterans legislation and amendments to the draft act. Many of these questions have a direct and indirect relation to the aviation industry.

The House Committee on Expenditures in the Executive Departments was scheduled to begin hearings Aug. 28 on amendments to the Surplus Property Act, one of which would replace the three man board with a one-man Administrator in accordance with President Truman's recommendation. This legislation will be of far reaching importance to the aviation industry because legal machinery for acquiring government-owned plans is to be overhauled.

On the Senate side, the O'Mahoney subcommittee of the Senate Military Affairs Committee was to begin hearings on surplus property amendments early in September. Both House and Senate committees will have before them bills embodying President Truman's recommendations for a one-man administrator.

Sen. McCarran expects to press the Senate Commerce Committee for early action on his bill S. 1 which would reconstitute the Civil Aeronautics Authority and the Air Safety Board as independent agencies of the government. On Aug. 29, Sen. McCarran's subcommittee of the Judiciary committee was scheduled to start hearings on S. 1120—a bill providing for the reorganization of the gov-

ernment. This bill as constituted would authorize the President to recommend to Congress the reorganization of government agencies and through this means, the reorganization of the Civil Aeronautics Authority could be accomplished without the necessity of special legislation such as S. 1.

Hearings on Control Of War Inventions Will Start in Senate

Hearings which undoubtedly will lay the groundwork for the control and use of wartime inventions, such as the Atomic bomb, are to start in the U. S. Senate Sept. 12.

Sen. Harley M. Kilgore (D., W. Va.) has announced that hearings on S. 1297 which authorizes the creation of a National Science Foundation will start on that date by the Senate Committee on Military Affairs. The bill was introduced jointly by Senators Kilgore, Edwin Johnson (D., Colo.) and Claude Pepper (D., Fla.).

It embodies the recommendations of Dr. Vannevar Bush, Director of the Office of Scientific Research and Development, with reference to establishment of a central scientific agency of the Federal Government whose powers are vested in full-time Government officials who would be directly responsible to the President and Congress. Dr. Bush directed the program which resulted in the development of the Atomic bomb.

One of the provisions of the bill requires that all inventions and discoveries resulting from Government-financed research are to be under public control and cannot become the monopoly of any private interests.

The War Department, meantime, is preparing a bill for introduction in Congress which will establish a national control body, including representatives of the State, War and Navy Departments, civilian scientists, other technical personnel, and representatives of other interested civilian agencies to cover the war and peacetime use of atomic power. This information was disclosed by Sen. Elbert Thomas (D., Utah), chairman of the Senate Military Affairs Committee who expects to introduce the bill.

Burden Enroute to South America

Development of civil aviation and integration of the airways system in the western hemisphere will be discussed with civil aviation officials of Brazil and Peru by William A. M. Burden, Assistant Secretary of Commerce, now en route to South America.

Col. Murphy Gets RFC Post

Col. Frank J. Murphy has been appointed associate director of the Office of Surplus Property, Reconstruction Finance Corporation in charge of surplus aircraft disposal. Col. Murphy was director of sales for Chrysler Corp. for 10 years and recently has been Chief of the Production Division of the Mid-West District, Army Technical Service Command.

The WHITING Propeller Work and Storage Stand

Safe storage of large propellers is provided by the Whiting Propeller Work and Storage Stand.

The unit's sturdy undercarriage, equipped with swivel casters, offers maximum strength and maneuverability; tubular construction makes obstructing supports unnecessary. It provides the greatest possible accessibility and is ideal for use in crowded spaces. Write today for complete information.



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WHITING

CORPORATION



Aviation
Division



So sorry!

DIRECT HITS on the huge aircraft plant at Omura near Nagasaki are scored by the first wave of B-29's. More to come. Official Photo U.S.A.A.F.

The hell we are! The little yellow men up Tokyo way just can't seem to take a hint. Germany learned — the hard way. German top-ranking General Von Rundstedt freely admitted that Allied bombing had smashed Hitler's power to fight back.

But in Europe all we used were the "little" Fortresses and Liberators which could only carry three or four tons of bombs. The Superforts, however, tote up to ten tons. *And fast!*

The Japs are getting a tiny sample right now of the destruction these planes can deal out. If they were smart they would haul out the white flag now before they find themselves on the receiving end of 2000-at-a-clip bomber attacks.

But if they don't . . . they'll just have to take it. And dishing it out will be vast fleets of these powerhouse Boeing B-29's, for whose great Wright engines we at Chandler-Evans are proud to be turning out precision-built carburetors. And sticking to this job is the best way we know to help ram Hirohito's face down his throat.



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"Over the Hump With the Wind and the Rain... *in my hair*"

Based on a true story taken from the war record of the Curtiss Commando



"A Girl Can't Say 'No' when she's on her way to cheer up lonesome G. I.'s who haven't seen an American girl in months. Not even when she's asked to make one of the most daring flights in the world... over the 19,000-foot Hump... with treacherous monsoon rains staging their big show of the year."



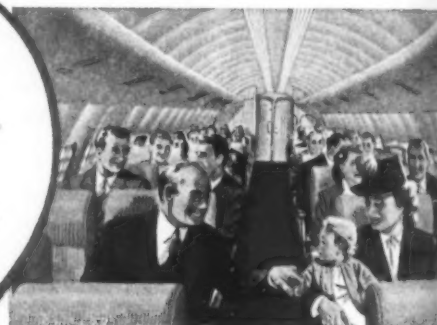
"Smiling Through an inferno of black storm clouds that rush past at 100 miles an hour... through solid walls of drenching rain. It was a trip that called for nerve... and it called for an airplane that was built to take it. Yes, that wind and rain really got *in our hair!* But there was no turning back."



"Command-o Performance. As usual, the Commando came through with flying colors. And our show went on for my favorite audience in the world... our battle-weary veterans. Was it worth it? Well, I hope it was worth as much to those boys as it was to me, to see them laugh and relax with a girl from home!"

THAT'S WHY
I WANT TO RIDE
THE AIRLINES THAT WILL

Fly Commando!



Design For High Living. New flying comfort aboard the Curtiss Commando is sure to delight your passengers. They will relax in the deeper, roomier lounge chairs, spaced to allow several additional inches of leg room, and designed for solid comfort. And they'll enjoy the unobstructed view from bigger windows beside each double seat, when they Fly Commando!



The More The Merrier. The more luggage and cargo a transport can carry in its holds, the better the airlines like it. A Commando has room for 3½ tons. And the ingenious Curtiss-Wright V-tab cuts loading time because the Commando is always in balance, no matter where the cargo loads are placed.



How To Please A Pilot. Just let him Fly Commando! The cockpit is designed for easy, restful handling. Controls are in easy reach of the pilots... no reaching back. Flight instrument panels are interchangeable right and left, and any instrument can be changed in less than a minute. So, Commandos spend less time at flight stops.

THE CURTISS

Commando

Today's Great Lifeline
Tomorrow's Great Airliner

Curtiss



Wright

FIRST IN FLIGHT

Twin-Engine Trimmer Amphibian Available Soon

Commonwealth Acquires Manufacturing Rights

A NEW ENTRANT in the light personal aircraft field which is expected to be in production within 90 days and available for delivery late this year is the three-place, twin-engine Trimmer amphibian, designs and manufacturing rights to which have just been acquired by Commonwealth Aircraft, Inc., Kansas City.

Originally announced several months ago by Allied Aviation, Baltimore, the first Trimmer prototype was of plastic bonded plywood construction. The Commonwealth statement, however, suggests that the production version will be of plastic or some other new material "developed since Pearl Harbor."

No definite price is being quoted at the present time, but the Commonwealth announcement of "a price about one-sixth of that of the nearest comparable prewar ship of its type" would place it in the \$5,000 class.

Designed by Gilbert G. Trimmer, the new aircraft is an amphibian high-wing monoplane with retractable landing gear. It is powered by two 85 hp air-cooled, horizontally opposed Continental engines mounted in the leading edges of the wing. Span is 35 ft. 6 in.; overall length 24 ft. 10 in. and height on wheels 8 ft. 7 in. Weight empty with standard equipment is 1,470 lbs. and design gross weight 2,200 lbs., permitting a useful load of 750 lbs.

The Trimmer has a top speed of 132 mph, cruising speed of 115 mph, and landing speed of 48 mph. It will take-off from water fully loaded into a 6-mile wind in 635 ft. Fuel consumption is 9 plus gallons per hour, and level flight can be maintained with one engine inoperative.

Two-Way Radio Optional

The Trimmer will have a normal complement of flight instruments including battery, starter and lights. Landing flap controls are operative from either of the dual control positions. Provision is also being made for the installation of two-way radio as optional equipment.

Unusual internal features include a galley and provision for converting the three seats into two full size bunks.

According to Commonwealth, practically all experimental work on the new aircraft has been completed, and only a few minor changes remain to be made before it is ready for CAA inspection.

The Trimmer will be marketed through dealers, and an extensive national advertising program is planned.

Commonwealth Aircraft, which was formerly Rearwin Aircraft & Engines Co., is also at work on several other postwar models, one of which will be a companion ship to the Trimmer but with greater horsepower and capacity.

Regulations for Pilot Certification

Civil Air Regulations for Pilot Certification, a complete compilation of those CAR parts involving pilot certification together with the latest amendments to those parts, has just been published by Aero Publishers, Los Angeles 5, Calif. The 120-page booklet also includes space for notes and check questions for pilots. It sells for \$1.50.



The Commonwealth Trimmer twin-engine, three-place amphibian which is expected to be available late in 1945.

Don't Land in Bean Patches!

Tip to private flyers—"landing fees" in bean patches are high.

Elmer Foss reached 500 feet following his takeoff from Rosemead Airport near Puente, Calif., when engine failure necessitated a forced landing. The plane was not damaged nor was Foss injured—but A. V. Handor and Pete Ravera said their bean crop was damaged to the extent of \$500.

Study May Aid Flyers In Radio Installations

The Federal Communications Commission and Civil Aeronautics Administration have announced that they are undertaking a joint study to determine ways and means of making it easier for private flyers to install and operate radios in their aircraft.

Under existing regulations control over aircraft radio is limited to the licensing of sets and operators. No technical requirements are stipulated and sets are not required by law. The present attempt will be to streamline examinations for licenses, rearrange technical vocabularies for the private flyer, and simplify applications for transmitter licenses.

Private aircraft radio is already simpler in its legal requirements than amateur radio because there are so many safeguards automatically placed on its operation, and because aircraft radios can be operated only on a single wavelength which does not impinge on other wave bands.

There have been some complaints, however, from aeromodellers who have had to qualify for "ham" licenses in order to fly radio controlled models and these may also be taken up.

Otto Named Aeronca Distributor

Otto Aviation Corp., Bloomfield, N. J., has been named distributor in New Jersey and Monroe County, Penna., for the three types of Aeronca planes, the Champion, a two-passenger tandem, the Chum two-passenger side-by-side and the Chief, dual control, side-by-side. Deliveries on all new planes can be made within 60 days, the company states. Dealer agencies for the planes will be set up in each county in New Jersey and one in Pennsylvania.

NATA Expected to Move Headquarters to Capital

Headquarters of the National Aviation Trades Association will be moved from Kansas City to Washington, D. C., and a new executive director for the organization will shortly be named, according to an announcement made following the August meeting in Kansas City of NATA officers, governors, regional presidents and executive committees.

The director will have complete charge of the business end of NATA and act directly under the Board of Governors and President Roscoe Turner. Clarence Mooney who has been serving as acting executive director will leave the organization in the near future. ServisAir, newly started NATA publication, will be dropped.

New additions to the original executive committee, now numbering nine, are Howard T. Ailor, Bloomsburg, Pa.; Joseph Garside, Boston; and Tom Davis, Winston-Salem, N. C.

Riddle Places Carl Anderson In Charge of U. S. Activities

Carl R. Anderson, vice president in charge of public relations for the J. P. Riddle Company,

has been named vice president in charge of all U. S. activities. The company operates the Riddle Aviation School in Miami and Escola Tecnica de Aviao in Sao Paulo, Brazil. Lt. Col. Arthur E. Boudreau, chief, Civilian Liaison Branch, Headquarters Army Air Forces has been appointed director of training. Col. Boudreau activated the AAF college training program in 1942 and later had charge of Civil Air Patrol pre-flight training for CAP cadets.

New Safety Regulation
Safety Regulation Release No. 188 regarding the conversion of Piper TG-5, Taylorcraft ST-100 and Aeronca G-3 gliders to powered aircraft has just been issued by the Civil Aeronautics Administration.

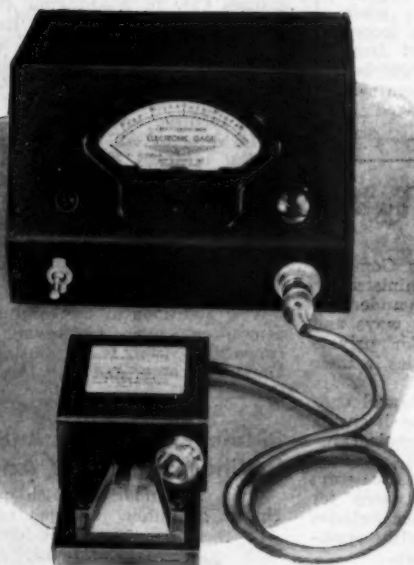


Anderson

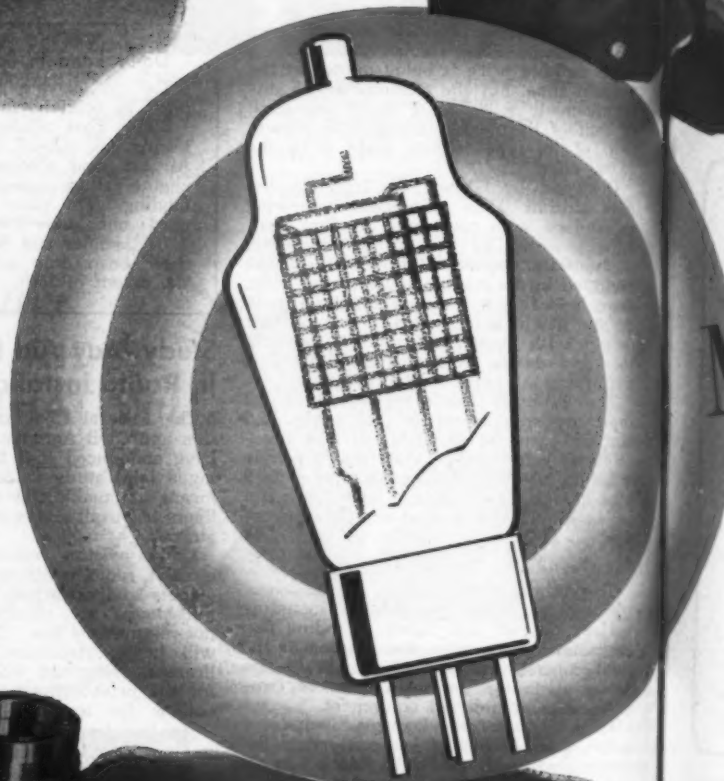
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TODAY, fine manufacturing calls for working tolerances not of thousandths—but ten thousandths, hundred thousandths and even millionths of an inch! One of the secrets of Jack & Heintz low cost mass production of high precision equipment lies in the ingenious electronic measuring gauges used throughout the eight plants.

With one of these J&H-developed-and-built gauges even an inexperienced worker can make a complicated precision measurement in a second. For laboratory experiments, Jack & Heintz engineers have made an electronic gauge capable of measuring 2/1,000,000"! One of the shop gauges pictured is calibrated to 25/1,000,000; others in common use are measuring ten thousandths and hundred thousandths day in and day out.

While most of these gauges fall into the "special purpose" classification, they do have one thing in common. That is the basic electronic circuit system that makes them so highly accurate. This method of measurement is new and, as perfected by J&H engineers, has unlimited possibilities for use wherever

exceptionally precise checking of parts must be done quickly.

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Waco VKS-7F to Feature Heater Used in Fighters

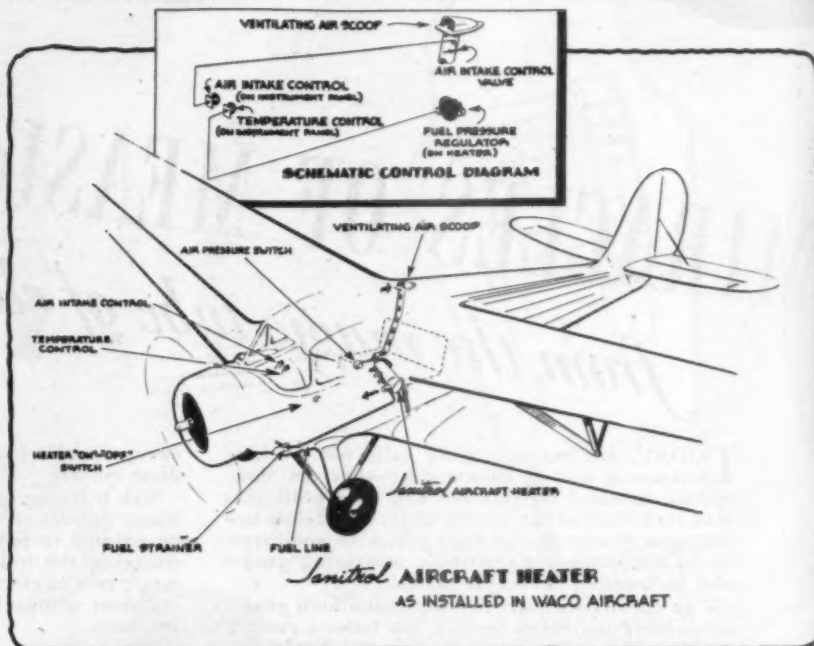
Waco Aircraft Co., Troy, O., has obtained Civil Aeronautics Association approval to install a Janitrol combustion-type aircraft heater of the type now being used in Army and Navy fighters in its postwar five-passenger VKS-7F cabin biplane, according to Charles M. Moffitt, service manager. It is reported to be one of the first installations of a combustion-type heater in a private aircraft.

Tests of the Waco aircraft with a 15,000 btu heater have demonstrated, according to the announcement, that passengers can remain comfortable without overcoats despite outside temperatures well below zero, whereas the muffler-type heater previously used was unable to deliver sufficient heat at temperatures below 40° F. In addition the Janitrol unit is said to eliminate completely all danger of exhaust gas leaks, and to reduce maintenance costs.

In the Waco installation the heater is installed under the rear seat, and the heated air is forced forward across the floor between the two front seats.



Sign Contract—Howard Brown (left) general manager of Western States Aviation Co., Glendale, Calif., is shown with James C. Welsch, Stinson sales director, after contract for \$1,000,000 worth of Stinson Voyager 125 personal plans was signed. Western States has been appointed distributor in Southern California and Nevada for Convair's line of Stinson lightplanes.



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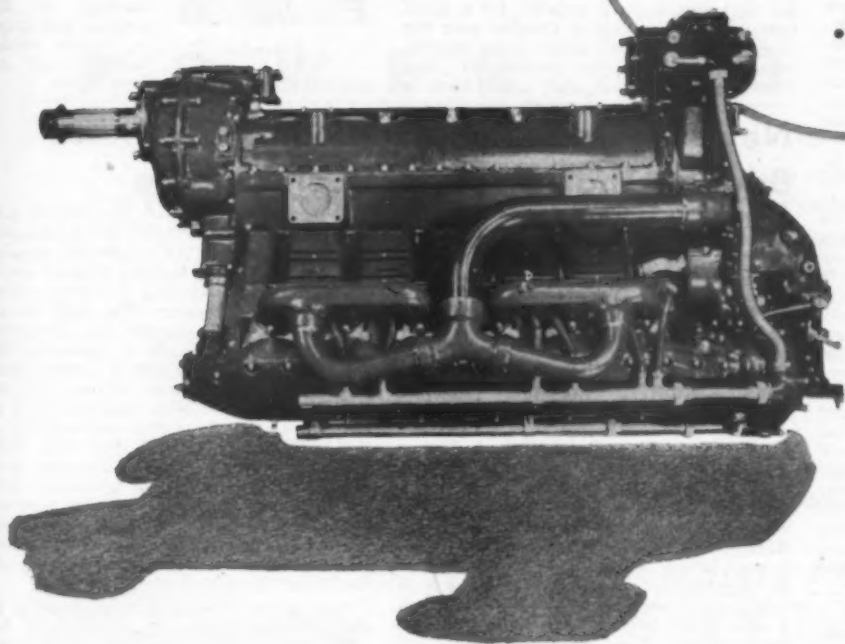
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Airport Users Told of New Trend in Planes

Boeing's M. F. Vanik Makes Important Observations

A TREND in aircraft design which will permit increased angle of climb, steepened approaches and improved brakes, bringing with them commensurate influences on landing facility requirements, was noted by M. F. Vanik, Boeing airworthiness requirements engineer, at the NAA's recent Third Joint Airport Users Conference held August 20-21 in Washington, D. C.

Opening the sessions in which air enthusiasts heard discussed "The Landing Area and Its Appurtenances," "Financial Aspects of the Airport Problem," "Airport Buildings and Equipment," and "The Impact of the Airport on the Community," Vanik described smooth, hard-surface runways as a necessity with the widespread use of tricycle landing gear. Reduced clearance, made possible by pusher types and other reversed configurations, will require elimination of all obstructions such as marker lights which protrude above the surface.

A group of "don'ts" in construction of larger airports was listed by Rufus Phillips, Jr., president of Airways Engineering Consultants, Inc. "Do not invest too large a proportion of total costs in a gold plated terminal building," he warned. "Do not construct them in too permanent a fashion. Don't build monuments merely as exhibits for the general public. Don't confine activities subject to expansion within fixed limits which are impossible or expensive to change. Don't plan anything just to meet existing problems."

James Angier, CAA engineer, posed strip lighting as the most desirable method of landing area lighting and mentioned, for small areas where this was not feasible, two substitute methods. More desirable, he said, is the boundary light system wherein the basic colors of strip lighting are maintained but the entire usable landing area is outlined with white lights.

Floodlighting Employed

The other system makes use of floodlights. This, he stressed, should be considered only for smaller landing areas or air parks that will be used infrequently at night.

Public ownership, control, construction and maintenance of airports was recommended by Fred C. Parks, general manager of Parks Air College. "An airport performs the same function for the aviation fixed base operator that a highway performs for the auto dealer," he said. "However, public funds provide the highway, and, following the same reasoning, public funds should provide the airport." The facilities of the public airport are open to all comers on an equal basis, Parks pointed out, thus making possible free competition. With airports publicly owned, controlled, constructed and maintained, there is an opportunity for uniformity of regulation as between one airport and another.

A downward revision in the CAA minimum standards for runway and taxiway lengths and widths, in approach glide ratios, in hangar specifications and field lighting was asked by Sheldon B. Steers, Director of the Michigan Department of

Aeronautics. He took the position that current standards are too high for many municipalities, discouraging airport development in two ways. First, it prevents many a city council from starting on a project that it feels would be too expensive. Again, it holds down the number of airports because, he said, if the minimum requirements were halved, the original expenditure might be spread to provide double the basic facilities.

90-Day Airpark Experiment To Take Place in St. Louis

St. Louis city authorities have approved a 90-day airpark experiment at Forest Park, St. Louis, former site of the city's old airport. The demonstration's purpose, according to NATA, is to exemplify the best development possible for a small flying field conveniently situated near the city's main business center, hotel district, industrial sections and residential area. The test period is to start about Sept. 1.

Former Michigan Airport Engineer to Leave Army

Lt. Col. Guy R. Richardson, for many years airport engineer for the Michigan Board of Aeronautics, has returned to the



Richardson

U. S. from three years in the service in Europe and North Africa, and expects to rejoin the Michigan board when he leaves the Army.

Richardson played a prominent part in the building or extending of 376 airports and strips in North Africa, having built the airports at Casablanca and Tunis.

New Airport Light Revealed; Many Times Brighter Than Neon, Yet Controllable

A new type of gaseous tube which may have an even greater effect on forthcoming approach control and instrument landing procedures than some of the war-developed VHF and radar equipment was demonstrated to visiting aviation writers by representatives of the Leland Electric Co., Dayton, at the CAA's Indianapolis experimental station last fortnight.

H. A. Cline, Leland project engineer, told AMERICAN AVIATION that these tubes were so new that the company had not yet had time to calibrate their brilliance or to evaluate their full potentialities and possible applications.

Among the tubes demonstrated was one with controllable brilliance operating off straight line current without a transformer which appeared to this writer to be anywhere from 10 to 100 times as bright as a comparable neon tube. Such a tube could be used, according to Cline, for approach lights, boundary lights, and similar airport applications, and would combine the exceptional visibility of neon with sufficient brilliance to penetrate poor visibility conditions, controllability so that they would not be too brilliant and blind the pilot under good visibility conditions, and the ability to operate off line current. Cline said the new tubes could supply light of any desired color without filters thus permitting more intense colored beams and purer colors.

One proposed application of this tube will be in the form of blankets made up of 13 four foot tubes spaced four inches apart and located at intervals off the end of the runway to give the pilot his approach path. By using different colored tubes for different blankets, it would also be possible to give the pilot his distance from the end of the runway. It is expected that an experimental installation of these blankets will be made at La Guardia Field in New York just as soon as Leland can produce sufficient equipment. The CAA also plans to make experimental installations of these tubes at Indianapolis in the near future.

A second variation of the Leland gaseous tube was a light of comparable brilliancy to the CAA's 3,000,000 candlepower stroboscopic flashing beacon which is capable of producing a steady rather than a flashing beam. The light shown operated off a transformer, but Cline said that they hope to have it operating like the other tube off a 240 V single phase line current in the near future, and that it should be possible to operate it off an aircraft electrical system particularly of the high frequency AC type now being considered, thus permitting airborne landing lights of unbelievable brilliancy. Like the first tube, the high intensity tube can be made to supply a colored beam without filters, and Leland is now working on a red beam searchlight for the Air Technical Service Command.

Still another possibility opened up by the extreme brilliancy of this new Leland light is the use of Polaroid windshields or screens for night flying.

A third light exhibited by Leland was a portable flashing light with the intensity of the stroboscope but which operated off a standard flashlight battery.

Many Lights Demonstrated

The Leland exhibit was an added attraction at a CAA demonstration of lighting developments which included the 3,000,000 candlepower stroboscopic beacon, three types of approach lights, a visual glide path indicator, and two-color boundary lights designed to let the pilot know under poor visibility conditions whether he is over the field or at one side of it. The CAA also described an omni-directional high-intensity beacon which utilizes the stroboscopic principle but can be seen from any direction instead of just within a 30 degree cone of the front as with the present model.

CAA technicians emphasized that the new Leland lights would in no way obsolete these proposed systems, but might instead be the key they had been looking for to make them 100 per cent efficient.



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12 Airlines Sign Leases For Idlewild Facilities

Leases for space and facilities at Idlewild Airport, on which New York City is now prepared to spend \$200,000,000, last month were signed by 12 airlines and then presented to the city's Board of Estimate for approval. The leases covered an initial period not to exceed 10 years with a maximum of four renewal periods of 10 years each.

The leases showed the following gate assignments to the carriers: American Export—7, American Airlines—35, National Airlines—6, Pan American Airways—12, British Overseas Airways Corporation—2, Trans-Canada Air Lines—2, United Air Lines—9, Eastern Air Lines—6, Transcontinental and Western Air, Inc.—15, Northwest Airlines—4, Pennsylvania-Central Airlines Corporation—7. The Swedish carrier, SILA, also was among those signing.

Indicating that the Idlewild oil and fuel supply market will be open to all companies, Comptroller J. D. McGoldrick has asked the Board of Estimate to reject fuel franchise bids already made by the Gulf Oil Company and a syndicate headed by the Texas Company.

Average Cost of Storing Lightplane \$15 a Month

It costs about \$15 a month on the average to rent storage space for a lightplane in this country, it has been estimated by Aeronautical Training Society following a coast-to-coast survey.

The figure is based on replies received from operators of typical standard sales and service bases in municipalities of various sizes ranging from the largest cities to towns of 5,000 inhabitants.

"Cost of storage for lightplanes at fields near major cities tends to be somewhat higher than the average figure," ATS reports. "It is slightly lower in smaller places, remote from cities, due undoubtedly to lower land values and less expensive construction. Rentals in the South tend to be a shade lower than those in the North but there are almost no places in the Southland where planes may be stored in hangars of approved construction operated by experienced management where rentals are below \$12.50 monthly."

Peruvian Airport Nearly Ready

The improvement of Limatambo Airport, near Lima, Peru, designed to make it one of the most modern and efficient commercial airports in Latin America, is almost completed. Three times its former size, Limatambo has two paved runways crossing at right angles, each over 6,000 ft. in length and 130 ft. wide. These are joined by seven connecting taxiways. A modern lighting system will permit scheduled commercial night operations for the first time in Peru.

A new \$450,000 (U. S.) administration building has facilities for government services—customs, health, immigration—air transport companies and technical offices, as well as for the handling of passengers. Machinery for pumping, equipment handling, generating electricity and other technical airport needs are all installed underground. A 97-foot highway, recently renamed "El Camino Roosevelt," is already under construction to connect the airport with the Peruvian capital, it is reported.

Airport Tender-Fuel Truck In Experimental Service

A new airport tender or fuel truck for light aircraft has been placed in experimental service by Esso Marketers and the operators of the New Haven, Conn., Airport, AMERICAN AVIATION was informed this week.

The new unit comprises a 600 gallon tender powered by single cylinder gasoline driven pump, and can be towed by either a tractor or a jeep. It can fill its own tanks from underground storage or from tank wagons, service aircraft with an overhead swing-type boom, service aircraft directly from barrels, defuel aircraft, or fill barrels from underground storage and from its own tanks.

An especially valuable feature for the small airport is the fact that during busy periods the tender can be used as a mobile unit, while during slack periods it can be utilized as a stationary unit, freeing the tractor for towing aircraft, mowing grass, pushing snow and other duties.

Designed by Esso Marketers aviation specialists, the new tender is now being built by three well-known manufacturers, and assembly line production is planned following completion of the experimental service period in New Haven.

Borsari Placed in Charge Of Surplus Port Disposal

George Borsari, former airport liaison officer of the CAA, will be in charge of disposition of all surplus Government airport properties. He will work under Frederick Babcock, deputy administrator in charge of real estate for the Surplus Property Board.

With the CAA for the past seven years, Borsari, a private pilot, assisted the Army and Navy in procuring civil airports for military purposes immediately after Pearl Harbor.

For the past year and a half, Borsari, as CAA representative, has worked to obtain an Army and Navy policy on disposition of military surplus airports.

According to the Surplus Property Act, after being released to the SPB by the military, an airport first will be offered for sale or lease to the State and the municipalities in the airport's vicinity. The Army is understood to desire that the surplus fields be retained in as good a condition as possible by the purchasers.

Detroit Area Reported In Need of 44 Airports

The Detroit Metropolitan Aviation Planning Authority has received the final report of the consultant engineering firms engaged in a six months survey of the Detroit region's probable future needs for airports to serve postwar air transportation.

Recommending that the control of all airports within the region embracing Wayne, Oakland, Macomb, Washtenaw, and Livingston Counties be placed in the hands of a regional authority, the report advises the location of some forty-four airports of various classes.

The findings of the consultants indicated only one major air passenger terminal was needed. Recommended intermediate ports were the existing Detroit Municipal Airport and for combination use in the Canadian area, the development of an airport upon an international site was recommended.



New Esso Marketers airport tender in use (right) as a fixed unit, and (left) as a mobile trailer truck.



Cutting dead-weight is certainly magnesium's primary job in aircraft. Its ready adaptability to all common fabrication methods, however, is another advantage that makes magnesium attractive to manufacturers. How usefully this factor is serving the industry is indicated in the aircraft applications pictured here.

From the sturdiest shock resistant members to the finest surface finish . . . from landing wheels for heavy bombers to satin-smooth sheet covering ailerons on fighter aircraft . . . magnesium is constantly extending its widespread application in modern airplanes. ★ The landing wheels, cast in magnesium, make important use of the high strength of this light metal in a vital functional application. ★ The aileron skins, a distinct fabrication triumph, are thicker than aluminum sheet of equal weight, permitting machine countersinking, instead of dimpling, for flush rivets. The surface so achieved is completely smooth. ★ Extruded floor beams—25% stronger and 5% lighter when

made of magnesium—are used for supporting floors in super-transport. ★ A major weight economy is attained in the 46-pound main landing gear pivots (cast by Century Metal Craft, Los Angeles) important among the many magnesium parts in American fighter planes. ★ Aircraft engine parts cast in magnesium help to reduce the weight-to-horsepower ratio. ★ Magnesium cover plates show how the lightest structural metal fits into the aircraft picture in the form of die castings. ★ Lightweight pedal-wells, formed and arc-welded from magnesium sheet, illustrate another magnesium fabrication advantage useful in aeronautical design. ★ And application continues to increase.

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AAF to Discharge 1,400,000 Within Next Year

Total Personnel Will Be Lowered to 900,000

MORE THAN 1,400,000 men will be discharged from the Army Air Forces within the next year under a new demobilization program now being placed in effect.

The air forces will reach a peak discharge rate of approximately 150,000 men monthly to bring its 2,300,000 personnel down to 900,000 in a year's time. Still later the air forces will be cut to about 700,000 men. The program was described in a nationwide radio address by Maj. Gen. Fred L. Anderson, Assistant Chief of Staff for Air.

Individual highpoint score men overseas will be replaced by others with equivalent training who have low point totals and with volunteers, Anderson said.

The air forces also disclosed that officers whose retention is no longer a military necessity will be released on a basis of three factors—their service point scores, their desires and their efficiency index.

Now eligible for release when their services are no longer required are flight officers with point scores of 36, second lieutenants with 42, first lieutenants with 58 and captains and higher ranks with 70 points. Officers with these scores may be discharged on request as soon as their services are no longer needed. Those who desire to remain will be chosen on the basis of their efficiency index which is gauged by their performance and record.

General Anderson said:

"In general our order of release is:

"1. Those desiring release in the order of their point scores.

"2. Those who wish to remain in the service but for whom there is no job, still in the order of point scores. Right now we are discharging those with more than 85 points who wish to be separated from the service and those over 38 years old. Among the officers, we are currently releasing those who wish to be relieved of active duty, those with critical point scores and higher, and certain pilots desiring separation, whose point scores are low."

Navy Training to be Readjusted

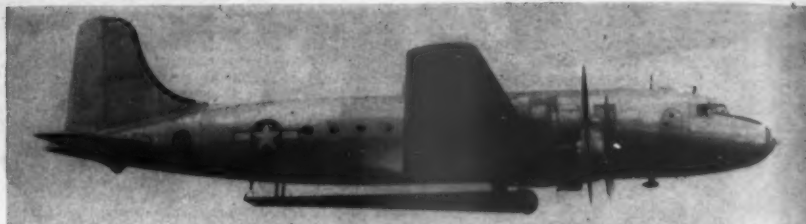
The Navy has announced that its post-war pilot training program will be readjusted to obtain a quota of 4300 Navy and Marine aviators a year. The Navy estimates that this quota would require taking in about 500 candidates per month based on past experience.

Superforts Dropped 169,421 Tons

Superforts of the Pacific Strategic Air Forces flew more than 100,000,000 miles and dropped 169,421 tons of bombs in raids on Japan from India and the Marianas. General Spaatz estimates that the B-29's reduced Japan's aircraft production 60 per cent and cut steel production 15 per cent. Japan's major oil-refining capacity was destroyed.

March Field Strip in Use

Initial take-offs and landings have been made on the new air strip installed at March Field, Riverside, California, for use by B-29's. Construction of the 6980-foot long, 150-foot wide runway was started last December. Completion of the entire \$2,500,000 project, which includes 8400 feet of new and re-



Wing Sling—ATC's Southwest Pacific Wing was requested to fly two complete C-46 wings from Biak to Bougainville. The loading problem was solved by slinging the wings underneath the fuselage of the four-engined carrier, as shown in photo. Once in flight, crew members said the attached wings produced no undesirable flight characteristics.

modeled taxi strips and turning mats, is scheduled for September 1. A complete new lighting system also has been installed.

ME 262A-1 at Wright Field

The first ME 262A-1 German jet propelled fighter captured by the AAF is now being assembled at Wright Field for flight testing and study by all agencies of the ATSC Engineering Division in an effort to discover whether innovations in its design can be incorporated in American jet craft. The powerplant uses an axial flow compressor as compared to the centrifugal compressor on American jet engines. Other differences include mounting of the power plants in nacelles instead of the fuselage, and slots in the leading edge of the wing to increase climb and reduce landing speed.

Army Commends CAA Advisers

Recognition of work done by CAA experts in the construction and operation of airway traffic control centers in North Africa was made recently by the Army's award of its Certificate of Commendation to CAA technical advisers Leo F. Hummer, Jr., Conrad H. Zimmerman, and Lester H. Saucke.

Gen. Arnold May Resign

Confirming rumors which have been current for several months, General of the Armies H. H. Arnold, commanding general of the AAF, told newsmen at a recent press conference that he expects to relinquish command of the AAF at a time "not too far off."

Equipment Available to Schools

The Supply Division of the ATSC discloses that the AAF made \$32,697,610 worth of obsolete and surplus precision instruments, engines and complete airplanes available to schools throughout the country between October 1, 1944 and June of this year. Issuance of equipment for schools has been transferred to the Educational Disposal Section 63 of the RFC in Washington from the ATSC's Office of Disposal Section.

2,000 Passengers Daily at Harmon

Harmon Field, the new ATC terminal at Guam, is designed to handle up to 2000 military passengers daily, according to Brig. Gen. Tom Hardin, Commander of the Pacific Division's Central Pacific Wing. Guam is about eight hours' flying time in a C-54 from Okinawa, Manila and Kwaajalein.

AAF To Avoid Manhattan

The Army is working out plans to reroute air traffic over the New York metropolitan area so that planes, in and outbound from near-by military airports, will not fly over the city's crowded sections. The move to rechannel air traffic was stimulated by the crash of an Army bomber into the Empire State Building last July.

Precision Bombing by 15th

Eight out of every ten bombs dropped during the war by the U. S. Fifteenth Air Force fell within 2000 feet of target-center, it has been revealed by Major General J. M. Bevans, Commanding General of AAF in the Mediterranean Theater of Operations. More than six of every ten bombs released by the Fifteenth's four-engine bombers came within 1000 feet of the point of intended impact. B-17's and B-25's dropped a total of 390,278 tons on targets from Africa to Austria.

Delivered With Dispatch

The War Department has disclosed that Brig. Gen. Thomas F. Farrell left Washington by air with the first atomic bomb only nine days before it was dropped on Hiroshima. Farrell supervised the bomb's handling in the Pacific, acting as field representative for Maj. Gen. Leslie R. Groves, commander of the project. Farrell and Groves never travel by air together, the War Department said, so that if "anything untoward" should ever happen to a plane, one of the men would be spared.

Veterans Get Priority

"In filling orders for workers any qualified veteran shall be given priority over all non-veterans," Veterans Placement Service Board has ordered. "On all orders specifying veterans no non-veterans shall be referred." The Board ordered all U. S. E. S. offices to set up a division responsible for veterans preference and the order for veterans preference was declared binding on all offices and may not be altered in the field. The question of job seniority has not yet been decided.

• Col. Reeder G. Nichols, formerly Chief, CAA Air Carrier Radio Section, has been decorated by the Army with the Legion of Merit for his work in installing radio facilities in the Pacific.

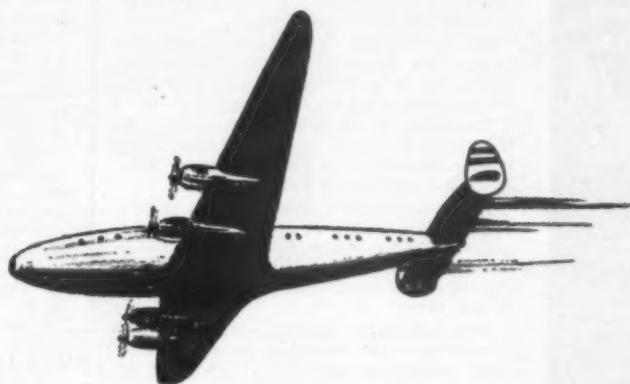
• Major General Charles B. Stone has been named to succeed Maj. Gen. Claire Chennault as commanding general of the 14th Air Force.

• Brig. Gen. George L. Usher, commanding officer of Wright Field in 1941 and 1942, has been appointed Deputy Commanding General, Personnel (T-1) of ATSC. Gen. Usher has been commanding general of Camp Davis Redistribution Station since last March.

• Brig. Gen. Franklin O. Carroll, chief of ATSC's Engineering Division since 1939, left Wright Field August 13 for an undisclosed overseas destination.

• Brig. Gen. James B. Newman, Jr., of Washington, D. C., has been appointed Air Engineer on the staff of Gen. H. H. Arnold, Commanding General of the AAF. He succeeds Col. George Mayo who has been temporarily appointed Deputy Air Engineer.

A New Job when the Wars are done



Until final victory is won the war job comes first with the Prestwick organisation. Strategic air supply is helping to beat the Jap, as it has beaten the Hun. But the day is coming when a Scottish airline will be ready to fly you the world around. It's nearer than you think. And air service by Scottish Aviation means the greatest possible variety of service at the lowest possible price—£3 9s 6d single Prestwick to London, £6 17s 6d single to Copenhagen, £17 single to Moscow, £36 2s single to Montreal, £45 18s single to Karachi, £47 single by night sleeper to New York.

That's the new job to which Prestwick is going to put the aeroplane—for the enlargement of trade as well as travel. In brief, Scottish Aviation are hastening the day when air traffic will move in volume at rates equivalent to third class surface fares, and there will be employment in British air transport for thousands of young Britons who are determined to make flying their career.

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ATC's Southwest Pacific Wing Sets a Safety Precedent

**Completes 290,000,000
Miles Without Fatality**

ONE OF THE outstanding records of military air transport during the war was chalked up during the year up to August 1 by the Southwest Pacific Wing of Air Transport Command when it completed 290,000,000 passenger miles without a single passenger fatality.

The area embraces sea and jungle between New Zealand and the Philippines, during wartime, and in an area not known for its good weather conditions.

The Wing is headed by Brig. Gen. E. H. Alexander and is part of the ATC Pacific Division of which Maj. Gen. William Ord Ryan is commander.

The Wing's record may well be a precedent for air transport in the world. The exact 11-month figure is 267,564,507 miles and the estimate for July 1945 is 22,918,350. The record is for the first year's existence of the Wing.

The overwater portion of the Wing routes has never been less than 50%, and since operation into the Philippines it has been 85%.

During the year the ton mile figure reached 70,085,553. The Wing's airplanes flew 211,069 hours for a distance of 32,999,171 transport miles. It evacuated 36,287 battle casualties and victims of tropical maladies, and originated 66,294 tons of passengers, cargo and mail at its stations of which 11,054 tons were mail. Since January 1 it received, processed and delivered 1700 ferried aircraft. Both Douglas C-47s and Douglas C-54s are used by the Wing.

The Wing's mission was to provide logistical support to General Douglas MacArthur's forces in the Southwest Pacific. In addition it has operated trans-Pacific terminals through which traffic flows to and from other areas of the Pacific and the U. S., and delivers ferried aircraft.

Parker, Intercity Aviation VP, To Leave ATC September 16th

Major Charles A. Parker, former vice-president of Intercity Aviation, an aircraft distributors and sales and service company headquartered at the Boston, Mass., airport, will leave military service September 16. He has completed over three years on the ATC's Headquarters Operations Division. Since entering the Ferrying Command in April, 1942, Major



Parker

Parker has performed many special missions in the field in connection with the ATC's CBI, Atlantic, African and Alaskan operation.

'Greatest' Assembly of C-54s

The Air Transport Command assembled the "greatest concentration" of C-54s on Okinawa ever brought together in one place in order to speed supplies to released Japanese prisoners of war.

The transports were assembled from all divisions of ATC for the special assignment, which an NBC broadcast said would include delivery of 45,000 packages of food and clothing. (A United Press dispatch said the planes also would be used for the movement of occupation troops into Japan.)

Maj. Gen. William Ryan, commander of the ATC Pacific Wing, said the special assignment would temporarily upset world-wide ATC operations, but that as soon as the Okinawa mission was completed, the planes and crews would be returned to their regular passenger-cargo runs.

PV-2 Harpoon Revealed By Lockheed Company

A new and larger successor to the PV-1 Ventura—the PV-2 Harpoon—has just been announced by Lockheed Aircraft Corp. A land-based search bomber like



the Ventura, the Harpoon has a greater wing span and is powered by two 2,000 hp Pratt & Whitney engines.

Improvements in the PV-2 include a 135 sq. ft. increase in wing area, greater fuel capacity, range in excess of 2,000 mi., a 4,000 lb. bomb load, increased firepower concentrated for forward firing, a newly designed empennage giving more control surface and greater stability, a curved windshield for greater visibility, and a more comfortable co-pilot's seat for long missions.

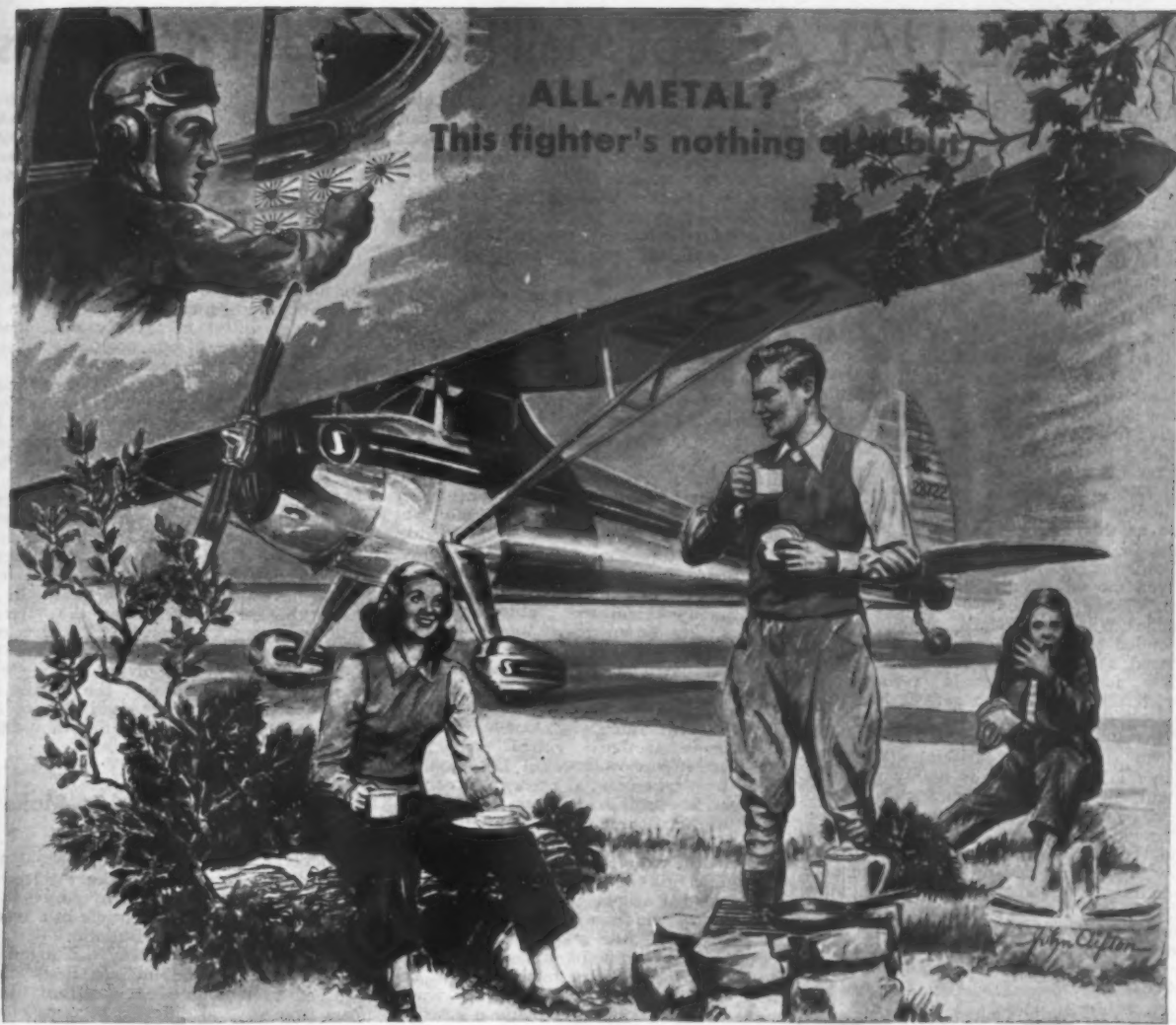
The PV-2 carries a five-man crew and is expected to be the fastest low level bomber in the Navy.

The first Harpoons were delivered to the Navy some months ago, but were called back to the factory when dive tests disclosed structural weakness in the wing. The necessary changes were incorporated in the production version within a few weeks, and the earlier ships are now arriving at Lockheed on a daily schedule for rework and return to service.

Boudreau Director of Training

Lt. Col. Arthur E. Boudreau, chief, Civilian Liaison Branch, Headquarters Army Air Forces office of ACAS Training has been appointed director of training for the J. P. Riddle Company of Miami which operates Riddle Aviation School, Miami and Escola Tecnica de Aviacao for the Brazilian Air Ministry, Sao Paulo, Brazil.

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AA, EAL, UAL Accept Mail Pay Rate of 45 Cents

CAB Modifies 32c Rate; Also Effective for TWA

AMERICAN AIRLINES, Eastern Air Lines and United Air Lines last fortnight accepted a mail pay rate of 45 cents per ton mile proposed by the Civil Aeronautics Board 10 days earlier in a sudden modification of the 32 cent rate set by CAB in show cause orders issued to the Big Four last January.

The modified rate, established by CAB in the face of the dramatically rapid shift from war to peace and the transitional period into which the close of hostilities threw the nation's airlines, was also effective for TWA. The later, however, obtained a 10 day extension beyond the date set for filing replies to the Board's modified rate order, and its acceptance or rejection of the tentative rate was not available as this issue of AMERICAN AVIATION went to press.

Both the Board and the carriers involved moved rapidly on the rate problem. Three days before the end of the Pacific War the Board announced in amended show cause orders that it considered a 45-cent mail rate more appropriate for the uncertain reconversion period than the 32 cent rate it had proposed for the Big Four last January.

This 45-cent rate, said the Board, will act to cushion the carriers against the economic shock which is highly probable as current abnormally high passenger load factors begin their almost inevitable slide downward to prewar figures. The Board and the carriers are uncertain as to just how rapidly this decline will occur or how soon it will become noticeable. In view of this uncertainty, the Board announced that it believed that no long-term mail rate should be set at present, and that it held 45 cents to be an equitable transitional rate.

Reasonable Security Desired

"It is our purpose," the Board said, "to fix a service mail rate which will be high enough to provide reasonable security against the risks inherent in the dynamic and uncharted transitional period ahead and which, at the same time, will be low enough to provide a strong competitive incentive for economical and efficient management. It is our further intention to fix a service mail rate which, over the transitional period, will provide a fair and reasonable return on the used and useful investment although on the basis of reported results for selected short periods the rate may appear either unduly high or unduly low."

"Present low costs per revenue ton mile of traffic carried," the Board said, "would appear to be almost entirely dependent upon existing abnormally high load factors. Should the overall air traffic potential prove to be sufficiently great to support continued substantial increases in frequencies over present routes before load factors are sufficiently reduced to permit relaxation or discontinuance of priorities, operating economies from such increased volume could be sufficient to overcome almost, or entirely, the tendency toward higher revenue ton-mile costs which would result from declining traffic loads."

The Board added that "there is also reason to believe that airline costs can ultimately be substantially reduced through increased economy and efficiency of management and that economies of this type, in addition to those resulting automatically as a result of increased volume of service performed, may reasonably be expected during the transitional and early postwar period."

Remarkable Uniformity

On the basis of operating reports by the carriers the Board found a remarkable uniformity of experience among the four lines. The range between high and low unit revenue ton-mile costs among American, Eastern, TWA and United was, for the 12 months ended May 31, only 3.99 cents. For that period, TWA had the highest unit revenue ton-mile costs of 39.97 cents, followed in descending order by American at 39.16 cents, Eastern at 36.15 cents, to United's low of 35.98 cents. Based on this similarity of experience, the Board determined that continuing a uniform rate of mail pay for all four lines was justified, and that "a uniform rate will not impose an undue burden or permit an unearned reward to any one of the four carriers." The present uniform rate for the Big Four and several other U. S. airlines is 60 cents per ton mile. The 45 cent rate when made final by CAB, is retroactive to Jan. 1.

American's acceptance of the modified rate was taken as a matter of course; the carrier itself had suggested this figure to the Board as an equitable mail pay rate and proposed to equate its passenger and express charges at that level.

Significantly the Board abandoned in the amended orders, the formula set forth in January which represented an attempt to base a mail rate upon a segregation of costs and investments actually allocable to the performance of mail service. The application of any such formula would not, the Board found, provide a satisfactory mail rate for more than a limited future period, because of present unsettled conditions.

Eastern referred to this proposed mail pay formula in a letter to the Board from President E. V. Rickenbacker accepting the 45 cent rate. Eastern, said Rickenbacker, was satisfied with the 45 cent figure as a transitional mail rate, and accepted it without any argument in the light of the Board's express statement that it was not attempting at present to enunciate any new theory of rate making.

It reserved, however, the right to object to the Board in any future mail rate cases involving this theory. Eastern had filed objections to the theory in answer to the Board's original 32-cent rate order of last January.

Like Eastern, United's acceptance of the 45 cent rate was made with the understanding that the rate was set for a transitional period. W. A. Patterson, United's President stated that "we are sure that our failure to object and to carry on a mail rate contest in these critical times will not operate to our prejudice in any future mail rate proceeding."

Patterson said that the 45 cent rate would make United's earnings for the first half of 1945 \$2,612,504, equivalent to \$1.58 per share of common stock, as compared with \$2,924,837 or \$1.79 per share, for the first half of 1944.

United's second quarter report showed that its mail pay at the old 60 cent rate would have been \$3,541,785 for the first six months of this year. At the 32 cent rate originally proposed by CAB this would have been reduced to \$1,799,791.

For the carriers accepting the 45 cent rate, only two CAB procedural steps remain. Purely formal hearings will be held at which the individual lines will state for the record that they make no objection to the rate tentatively set by CAB. A Board order will then make the rate final.

NAA Chapters Urged to Make Intra-State Traffic Surveys

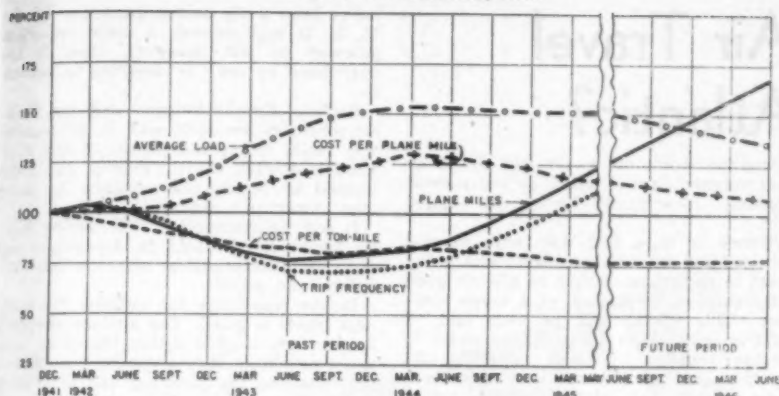
Chapters of the National Aeronautic Association are urged to take the lead in undertaking comprehensive surveys of intra-state air traffic potentials in a recent NAA Chapter Service Bulletin.

Mechanics of the survey, as suggested by the NAA, would include, first, selection of a committee composed of members from several different sections of the state. The committee should be able to make ready contact with Federal, state, county, municipal and community officials, and to delegate a large share of their work to individual chapters.

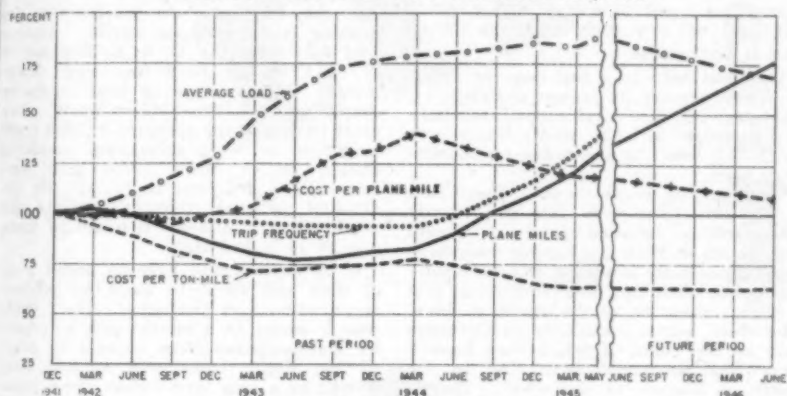
The kind of information needed to make the survey effective is the next problem for consideration. Some states may have less agriculture, more industry, than others. The discretion and general knowledge of the committee will determine which facts should be sought through a questionnaire.

The charts (right) attached to the Civil Aeronautics Board's orders modifying its proposed mail pay rate for the Big Four carriers from 32 to 45 cents per ton mile, show clearly the remarkable similarity in operating experience among American, Eastern, TWA and United. For each carrier the current cost per plane mile flown is substantially higher than the 1941 cost. Should the average traffic load curve turn sharply downward as a result of the end of the war, the Board believes that the cost per ton mile curve would be forced sharply upward. The present downward trend in the cost per plane mile curve, in the Board's opinion, will probably bring unit plane mile costs for aircraft of equivalent capacity below the 1941 level. This curve is an accurate indicator of the operating economies being effected by the four major carriers. The charts also show that during the wartime period, trip frequency and plane mile curves remained close together, while operating costs per plane mile grew in inverse proportion. From this, the Board deduces "that operating economies from expansion of plane miles flown will meet increasing resistance if and as the expansion of miles takes place through extension of route miles served rather than by increased frequencies on routes already in operation." The present low costs per revenue ton mile of traffic appear to be almost entirely dependent upon abnormally high load factors. The Board's predictions for the future show a decline in costs per plane mile.

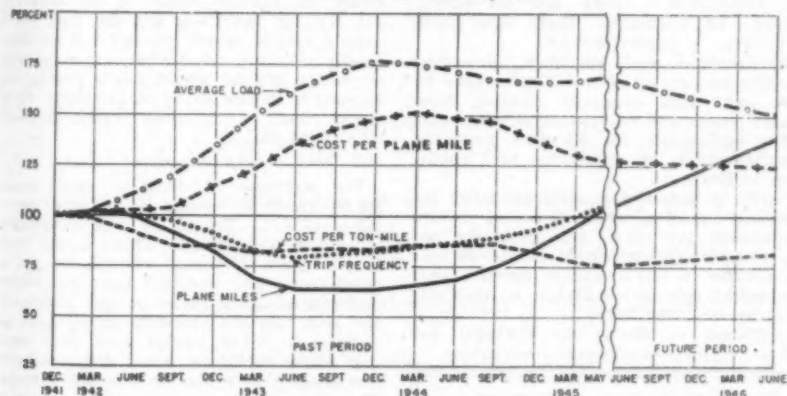
AMERICAN AIRLINES, INC.



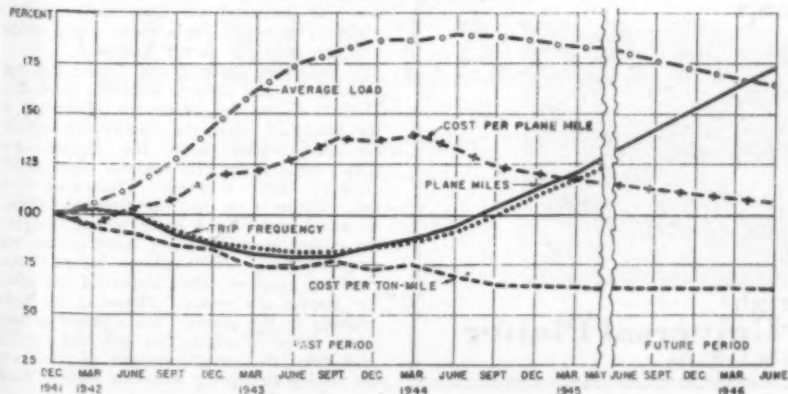
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Passenger Fares Reach Lowest General Level

Airline passenger fares reached their lowest general level in history last fortnight as American, United, Eastern and Northwest led the U. S. carriers in reducing passenger tariffs over their entire systems to four and one-half cents per mile.

Among the remaining carriers who simultaneously lowered their fares on competitive routes to the four and one-half cent level were TWA, Northeast (between New York and Boston), National, Delta, Chicago and Southern (between Peoria and Chicago, St. Louis and Chicago, and Little Rock and Memphis.) Continental, Braniff, Mid-Continent, and Western-Inland.

Braniff's reductions were effective not only over its competitive routes but also over other portions of its system. Work on tariffs which will make the four and one-half cent rate effective for all Braniff's routes is underway.

PCA joined in the downward movement a few days after the other carrier's reductions went into effect Aug. 20, although earlier it had protested to CAB against the four and one-half cent tariffs filed for approval by American, United, Eastern and Northwest. PCA's protest brought a sharp rebuttal from Eastern Air Lines' attorney, E. Smythe Gambrell, who told the Board that PCA was hardly in any position to object to any attempts by other carriers to give the public the benefit of lower fares inasmuch as it, PCA, was charging fares as high as nine cents per mile on some of its route segments.

Some of the reductions made by PCA amounted to as much as 50 per cent. Its Washington-Pittsburgh fare was reduced from \$13.40 to \$8.65; the Detroit-Washington fare became \$18.50 compared with the previous \$23.90.

TWA's Average 7½ Percent

TWA's reductions averaged 7½ per cent, with the New York-Los Angeles fare coming down from \$124.75 to \$119.10. TWA's New York-Chicago fare is now \$33.65; its new Washington-Chicago fare is \$28.30.

United's system-wide reduction brought its fare level 4½ per cent below that formerly in effect. Its New York-Los Angeles and Washington-Chicago fares are identical with those of TWA.

Eastern's reduction, averaging 8 per cent, brings the line's general fare structure 24 per cent below that in effect before Pearl Harbor.

Braniff estimated its reduction to be approximately 6 per cent.

Several of the carriers emphasized that the fare cuts were not designed to attract more business; airline planes, they pointed out, are now being operated at near-capacity on practically all routes.

The new low tariffs represent a substantial step toward the U. S. airlines' goal of making air travel available to an ever-widening section of the public through progressive reduction in cost to the passenger. Most of the new four and one-half cent per mile fares are below the current first class rail plus Pullman fares, particularly on long hauls.

For American Airlines, the fare cut was part of its announced program of equating passenger, mail and express charges at the 45 cent per ton mile level.

How Soon Can Air Travel Be Sold Across Atlantic?

Europe Seen In No Shape To Receive U. S. Tourists

By W. W. P.

NOW THAT the North Atlantic air services have been certificated and plans are moving forward for the launching of experimental and proving flights over the three major routes, the big question is: "When can air travel be sold to Europe?"

Tourist travel to Europe is some time off.

There are plenty of takers on this side, but Europe is in no condition to receive tourist business.

It is very certain that the initial volume of business by PAA, American and TWA will be from business sources—people who either have essential business of their own over there, or who are going over for specific business purposes. There should be no lack of this type of traffic.

But it's going to be awhile before the average American out to take in the European sights can get a passport easily and spend a month or two of pleasure on the Continent.

Europe is sick, far sicker than the average American realizes. Somehow the story hasn't been told over here. I know because I've been asked countless questions since returning from Europe in early August and all point to the bare fact that Americans simply can't conceive of the paralysis that has hit Europe.

Scandinavia Will Bounce Back

Here is my own estimate of the future: Scandinavia will recover first. It is just possible that a limited amount of pleasure travel could be accommodated over there by next summer—just possible. But Americans will be shocked at the lack of essential comforts.

In terms of economic recovery, Holland will come up rapidly in a business way. The Dutch were hit very hard but they are enterprising and they are working with one mind to recover their worldwide business position. But for tourist travel, The Netherlands won't be ready by the summer of 1946.

England won't be in too bad shape by next summer, but it won't be the prewar England. It will still be on the rugged side.

France is in a bad way with myriad political and internal problems and a big upset in the offing—either an all-out good old-fashioned revolution, or a tough election. This winter will be very bad. I can't imagine Paris being in any shape to receive tourists by next summer. As for the rest of France—it varies from place to place, but internal railroad transport is in bad condition and will be for a long time—and there is no motor transport and not any early prospects for it.

Italy Is No Paradise

Italy has been in a bad way for years. It should recover its prewar condition by next year but that doesn't mean that Italy is a paradise. It isn't. Italy's future isn't bright. It won't be a paradise for tourists very soon.

Germany, of course, is out. There isn't a city left. The very fact that twenty years will be required merely to rebuild the houses in Berlin, assuming manpower and materials are available, and not counting public buildings and industry, is just a slight indication of the situation there. The chief tourist attractions in Germany will be the ruins, of which they have a very fine assortment from Kiel in the north to Munich in the south. There's nothing left in the way of prewar tourist attractions. There are no hotels. There's no transport. Right now there isn't even a postal service.

Switzerland will be okay, providing Americans can get there. Undamaged by the war, with transport running from water power and not coal, and with sufficient agriculture for its own purposes, Switzerland is in almost the best condition in Europe.

Spain is bad, and much depends on the political situation, which is bound to turn up almost any time. But when the political upset occurs, Spain should be able to resume in fair condition given a year to impart essentials. But it is drab and will be for some time.

Portugal is okay, but Portugal has

never been a big tourist attraction for the U. S. It may become a more important gateway by air, however, than it has ever been by sea. It deserves to become so.

Austria, Czechoslovakia, and the Balkan countries are sick, and in no possible way ready to receive visitors of any kind. Food is acutely short. Vienna was badly blasted by bombs and artillery, far more than Americans realize.

It will be summer of 1947 before tourist travel can be sold to Americans and even then there will be places which can't deliver the goods.

In the meantime the outlook for business travel is good. The airlines shouldn't have much trouble filling the seats both ways providing they have set up efficient organizations for handling and processing the traffic, and providing they don't put on too many schedules at the start.

In the long run, air travel over the Atlantic is going to be terrific. Anyone who flies from the U. S. to England in 16 or 17 hours (and less with newer planes) will never go by boat unless he simply wants a vacation en route. Five years from now the pleasure-minded trade ought to be very substantial assuming Europe settles down. The main upheaval is ended, but there will be individual national upheavals before the whole thing is ended. Belgium to name one, is in a bad state.

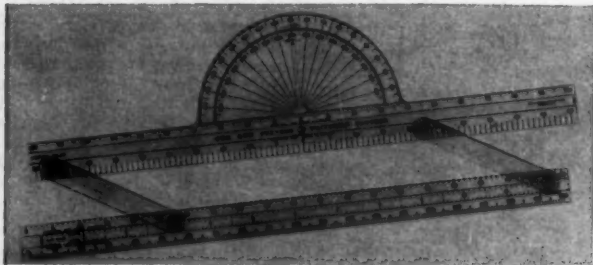
U. S. airlines will have to spend a lot of time and effort to build up efficient organizations on the other side. Right now it would be a terrific task to organize transportation from airports to cities, to find hotel rooms, and to find food. It will be a long time before these problems are eased. The only way to travel easily in Europe today is in uniform (U. S.), for the U. S. has the only good supply system worth its salt. A civilian simply wouldn't stand a chance of getting anywhere and he would pay a prodigious amount of money living on his own. He'd spend most of his time trying to find enough to eat.

Rail Travel Nearly Impossible

For example in Paris a meal costs \$30.00 American money if you want anything to eat. Travel by rail in France is next to impossible. There is no coal. If you were fortunate enough to get a hotel room, you wouldn't have hot water and you would be lucky to have sheets on the bed. At the sidewalk cafes there is nothing to drink except very poor beer and some mediocre wine and synthetic orangeade that brings on stomach cramps. There are no buses and so few taxicabs as to be negligible, and the Metro (subway) is jammed all the time. It isn't pleasant to be in Paris these days, unless you are on U. S. Army business.

In Norway there is an acute shortage of food. I had dinner with Mr. and Mrs. Thomas Olsen, he being the chairman of the board of DNL, the Norwegian airline. We had whale meat for dinner, and whale meat is the Norwegians' meat ration once or twice a week. Otherwise it is fish. There is no coal nor fuel in Norway, no soap, and in the hotel where I stayed the covering on the very hard pillow was crepe paper. Norwegians haven't had clothing, soap or other imported essentials for almost six years. There is virtually nothing in the stores. It's a place to stay away from because you get the feeling that even the small amount of food you eat means depriving someone else of food.

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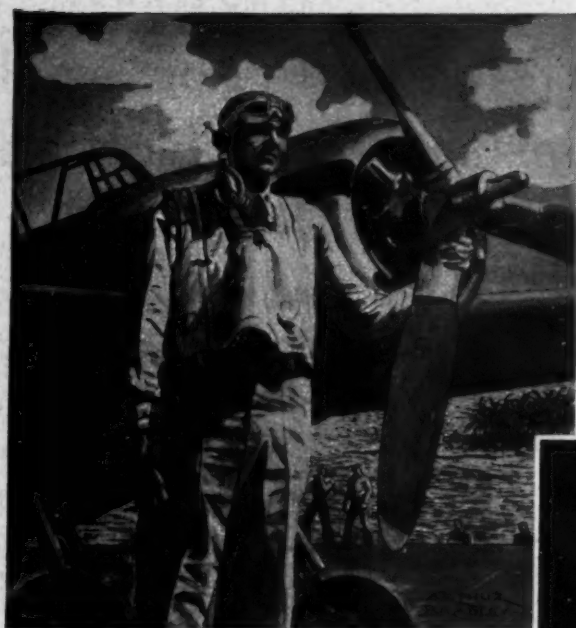
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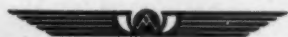
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American and British troops are forbidden from buying food or anything else in the shops or restaurants—only beer is available. The Army mess is quite good, but that's military and not typical of civilian life.

Almost anywhere in Europe, except England, boys and men follow you if you are smoking and wait until you throw away your cigaret—and then they dive for the butt. It's often embarrassing. Cigarets range in price from \$10.00 a package in Berlin on down the line but rarely less than \$2.50 a pack. A cartoon makes you wealthy.

Hot water is rare, although it is surprising in how many unexpected places you find it. Norway has some hot water, but Denmark has had no coal for five years and the hotel taps have been discontinued so long I don't know that they'll operate when coal is obtained.

Pure drinking water is difficult to find on the Continent. There are times when you'd pay \$10.00 for a cold Coca Cola or just a big glass of pure water. In Marseilles the tap water is poisonous. Same in Berlin. It isn't too good in Paris.

Starvation Real Possibility

Americans read headlines that they must ship food to Europe to avert starvation. It's no bunk. If several million people in all of Europe don't starve to death this winter, many will be surprised. No amount of shipping filled with food could avoid it, for internal transportation in Europe is scarce. We'll probably never know how many people die of starvation this winter, for most of them will be in Eastern Europe, which is virtually inaccessible now.

So international air transport will have to grow according to the ability of Europe to receive and take care of visitors. This can start next summer—especially after the first summer food crops come in. But 1947 will be the earliest for any big movement of people. Even then the airlines will have a job on their hands to service passengers once they have landed in Europe. In the U. S. the airlines merely sell tickets and the passengers do everything else. It will be different over there except for business travelers. Hotel, food and local transport are the big items.

Meantime it would appear that Latin America will get the biggest share of our tourist travel for the next two years. This won't hurt. There's a lot in South America to interest the people of the north. But one of these days when Europe recovers to a better extent, Europe will be a big attraction, as it always has been, to Americans. And air travel will make those two-week vacations possible. That's one side of the business that can't be over-sold. It'll click.

Date for Rocky Mountain Case

Oral argument before the Civil Aeronautics Board in the Rocky Mountain Case (Docket 132 et al.) will be held Sept. 10 in Room 5042, Commerce Building, Washington, D. C. Because of the large number of parties, presentation time has been limited to 45 minutes. Braniff Airways and United Air Lines have been allotted 15 and 30 minutes respectively. The order of presentation will be: Ray Wilson, Inc.; Mountain States Aviation, Inc.; Intermountain Air Lines; Colorado Air Lines, Inc.; Thomas Air Service; Pueblo Air Service; Frontier Airways, Inc.; Braniff Airways, Inc.; Massey & Ransom Flying Service, Inc.; Summit Airways, Inc.; Western Air Lines, Inc.; Inland Air Lines, Inc.; Midwest Airways; United Air Lines, Inc.; Continental Air Lines, Inc.; and Public Counsel.



Boeing Stratocruiser (above) and Boeing B-29 Superfortress

Finish the Fight — with War Bonds

Trail-blazer for peacetime flight

The Boeing B-29 Superfortress is something more than our most vital weapon in the war against Japan. It embodies principles that will revolutionize air transport when victory is won.

Not only have the great Boeing planes in which you will travel after the war already been designed . . . a military version of the first true super-transport of the future—the Boeing Stratocruiser—has broken all records for transcontinental flight, with a coast-to-coast average speed of 383 miles per hour!

Boeing has had more experience in the design and building of four-engine aircraft than any other manufacturer in

the world. Like the Superfortress, the new Stratocruiser has four engines—and even greater horsepower will be added.

Like the B-29, it will have the extraordinarily efficient Boeing wing, giving it huge carrying capacity—plus higher performance and greater economy in operation than any other transport.

Again, like the Superfortress, the Stratocruiser benefits from Boeing leadership in stratosphere research and the production of aircraft for high-level, over-weather operation. It will have improved pressurized cabins—plus new refinements in sound-proofing and air-conditioning.

It has all the structural and aerodynamic advances of the last three years, proved in war on Boeing-built aircraft—all the new features contributing to safe navigation, ease of control and dependable performance—plus passenger comfort never before imagined. It expresses, as no other commercial airplane has yet done, man's growing understanding of the laws of flight.

When the war ends, Boeing principles of research, design, engineering and manufacture will bring you the Stratocruiser and other advances in air transport . . . and you may know of any airplane—if it's "Built by Boeing" it's built to lead.

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Ball Clubs May Fly

"Fly" will soon have added meaning for the major league ball clubs when their teams start using the airlines to keep pennant dates. United Air Lines reports that 11 major league clubs have signed volume travel plan contracts with the company. Included are the New York Yankees and Giants, Chicago White Sox and Cubs, Cleveland Indians, Washington Senators, Boston Braves, Philadelphia Phillies and Athletics, Pittsburgh Pirates and St. Louis Browns. Numerous minor league clubs also have taken out contracts. Harold Cray, vice president in charge of traffic for UAL, looks for a large use of air transportation by other forms of sports as well.

AA, EAL Desire to Change Airports in Philadelphia

American Airlines and Eastern Air Lines have notified Philadelphia authorities of their wish to transfer operations from that city's Northeast Airport to its Southwest Airport about Sept. 1, or as soon thereafter as possible. Believing Philadelphia can well use two major airports, councilmen have introduced an ordinance to be voted upon next November calling for expenditure of \$3,500,000 on the Northeast Airport and a loan of \$5,000,000 to cover development of the Southwest Airport.

Engineers from five major air lines have recommended that the southwest field have a single runway system, 6500 to 8000 feet in length and be able to accommodate 40 to 60 movements per hour. Also urged was construction of a 12 to 32-gate terminal of two-levels, hangar and ramp areas for servicing and storage of the largest planes, separate cargo ramps and terminal area, enough space for dual-runway development, and, to reduce field traffic, a modified tangential dual-runway pattern.

Northeast Airlines has applied to the CAB for extension of its present route to Philadelphia, planning to operate non-stop flights from points on its current system to Washington, Philadelphia and Baltimore.

PCA Accepts 36 AAF Fliers As Co-Pilots After Tests

Pennsylvania-Central Airlines has accepted as co-pilots 36 former AAF pilots who have flown more than 3500 overseas missions and amassed nearly 60,000 hours of flight time.

The fliers are part of a group released under a program by which a limited number of air corps personnel, having completed overseas combat duty, are being made available to the nation's commercial airlines. The men were signed on for co-pilot training with PCA after being carefully selected from hundreds of candidates by a panel of the airline's personnel, medical and flight operations departments. They were assigned to regular flights this month after undergoing a rigid course in readjustment and reorientation to effect the proper transition from air corps to commercial pilot.

Five Airlines Making Redeployment Flights

Five U. S. airlines, including Pan American Airways, started operating under the air redeployment plan Aug. 27 which entails the transport of 25,000 soldiers monthly across the United States under Army contracts.

Pan American's initial flight was over the route of United Air Lines. A company spokesman said that permanent arrangements were to be made later with either United, American, or TWA to fly over their routes and use their service facilities.

It was the first time that Pan American had operated over the domestic routes of this country—a fact made possible under the terms of the Army contracts. Its operations were viewed as having some bearing on its aspirations to operate domestic routes in the postwar era. The company does have applications on file with the Civil Aeronautics Board for transcontinental services.

The other carriers participating in the redeployment of troops are American, United, TWA and Northwest. The Douglas DC-3 type C-47 transport planes were being used, having been made available by the Army. All except Northwest had received 17 planes and when the plan is in full effect, five round trips will be made daily between Newark, N. J. and west coast ports. The planes were to carry 21 soldiers each, with 40 pounds of personal luggage per soldier. Hundreds of former airline pilots were released by the Army to fly the planes.

The routes that the various carriers will fly and principal stops to be made are as follows:

American: Newark, Columbus, Memphis, Ft. Worth, El Paso, Tucson, Los Angeles Municipal airport.

United: Newark, Chicago, Denver and Salt Lake, San Francisco.

Northwest: Newark, Detroit, Minneapolis, Fargo, Billings and Spokane.

TWA: Indianapolis, St. Louis, Kansas City, Albuquerque, Los Angeles. On some trips TWA planes will continue on from Los Angeles to San Francisco.

First National Skyway Loads Consist of Fruits, Vegetables

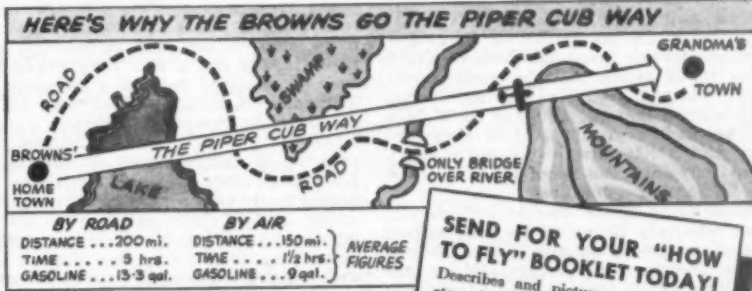
First contract-non-scheduled air freight shipments transported by the newly-organized National Skyway Freight Corp. consisted of two shipments of 10,000 pounds each of fruits and vegetables flown from California to Eastern markets.

Principal cargo of the two planes which took off from Salinas and Bakersfield included packaged grapes, strawberries, plums, peaches, nectarines and lettuce. The perishables were flown to Detroit and Atlanta. The shipper was Ralph E. Myers who has been regularly shipping perishable products from California to points in the East for several months.

C. & S. Gets New Ad Agency

Chicago and Southern Air Lines announces the appointment of Battern, Barton, Durstine and Osborn, Inc.'s Chicago office to direct the company's advertising. A budget of \$150,000 has been appropriated. The media will include general magazines, newspapers, trade papers and billboards. Schedules will start Oct. 1.

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Write us for information on where to obtain movie films showing "How to Fly" and "The Construction of a Light Airplane." Interesting, clear, instructive sound narration.

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Describes and pictures all the basic steps in flying. Over 50 step-by-step photos. Many other facts and full-color pictures of Piper Cubs. Write Dept. AA95, enclosing 10c in stamps or coin for postage-handling.

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FREE Booklet, "What Your Town Needs for the Coming Air Age," illustrates and describes various types of landing facilities. It will help your community plan an inexpensive landing area now! For your copy, write Department AA95W.

Few Airlines Making Outright Purchases Of Planes; Leasing Much More Attractive

U. S. airlines figuratively have changed almost overnight from the role of a suppliant in a wartime equipment market to that of a shrewd quality buyer in a customer's paradise.

The end of the war has changed the picture completely. A month ago, the airlines were threatened, though never seriously, with the loss of some of their operating equipment to relieve the burden on this country's transportation system caused by the redeployment of troops. Today the airlines are showing a marked lack of interest in the opportunity to purchase from current production Douglas DC-3 type planes (C-117s) from the assembly line of the Oklahoma City plant of Douglas Aircraft Co. where military production is to terminate early this month.

Availability in ever increasing numbers of transport type planes through surplus property procedures which enable leasing on a yearly basis until improved DC-3 and DC-4 types can be obtained has changed the attitude of aviation executives toward investing airline funds in outright purchases. Leases can be canceled at the end of a year or two under surplus deals and money thus saved can be used for purchasing of new and improved types of equipment.

Through authoritative sources, the airlines have learned that as many as 100 Douglas DC-3 types (C-49s and C-53s) will be declared surplus within the next two months. Twenty-two C-53s and C-47s were included in SPB's 16th allocation August 25.

Modification Required

While these types require considerable modification for airline use, the lease feature in surplus procedures is sufficiently attractive to warrant many airlines in spending the time and money incident to their conversion. This is especially true now that surplus planes are coming along in such numbers that the airlines can select aircraft that are in relatively good condition and types which meet their specific airline requirements.

And after the occupation of Japan has been completed, large numbers of DC-4 types (C-54 types) will be made available. Through reliable sources, it has been learned that at least 20 of the C-54Es will be made available to U. S. flag carriers and a like number of the military troop carrying, non-standard for airline use, to foreign applicants.

While many of the smaller airlines will have relatively little use for four engine type of equipment because of their shorter routes, many of the larger airlines are curtailing DC-3 type acquisition because four engine types, adaptable for transcontinental use, are in sight through surplus property procedures.

In connection with the military contract on C-117s at the Oklahoma City plant, Douglas Aircraft Co. officials were, at this writing, endeavoring to negotiate the necessary authority from the War Department to continue their production for civilian use. Lease agreements for use of the government plant at Oklahoma City, the tools and process materials were being prepared at Wright Field. If satisfactory lease arrangements can be worked out, then Douglas officials and the Army

will determine whether U. S. airlines and foreign flag operators will buy enough of the planes to warrant a continuation of production. As this is written, little interest had been shown by the airlines in these planes.

The Army-Douglas contract called for 131 planes. By the end of August when production under the military contract was scheduled for termination, approximately 30 planes were to have been produced. These planes are standard airline equipment, certifiable by CAA for immediate airline use, except for dump valves. Under a CAB exemption order, the planes can be operated at the provi-

sional take-off limit of 25,200 lbs. until Feb. 1 when dump valves must have been installed.

It is understood that the War Department has evidenced an interest in continuing this production because the government-owned plant, considered for stand-by classification in peacetime, costs approximately \$2,000,000 annually for maintenance alone. If Douglas takes over its operation, on some lease arrangement, the government would be spared a considerable amount of this maintenance expense for some time to come.

Elmore Joins Arinc

Enoch Elmore, radio specialist in the maintenance branch of WPB's Aircraft Division, has resigned to join Aeronautical Radio, Inc.

Proposed Part 42 Places Limitations On Use of Single Engined Transports

Single engined aircraft may be used for non-scheduled air transport in the daytime under contact flight conditions but their use for night flying and under instrument flight conditions would be strictly limited and barred completely after Dec. 31, 1947, according to the proposed Part 42 of the Civil Air Regulations pertaining to non-scheduled air carrier certification and operation rules which is now being circulated for comment by the Civil Aeronautics Board.

Other provisions in the proposed draft would require the carrying of oxygen apparatus for the flight crew on any aircraft operating at 10,000 ft. for a continuous period of more than 30 min., or at an altitude exceeding 12,000 ft. for any length of time, and a separate oxygen supply for the latter case. Multi-engined aircraft would have to be equipped so that engine rotation could be stopped promptly in flight, and would have to carry a fire extinguishing system to serve each engine compartment.

Pilots would be limited to 36 hours in air transportation in any 7-day period, 85 hours in any one month, and 1,000 hours in any one year, with the added restriction of 100 hours total commercial flying time in any one month and 1,200 hours in any one year. They would further be required to take a complete 18-hr. rest from flying if more than 10 hrs. are flown in any 24-hr. period.

Operating rules would require the carrying of sufficient fuel considering the wind and other weather conditions expected to fly to the next intended landing under contact flight rules, or to the alternate airport under instrument flight rules, plus 45 minutes thereafter at normal cruising consumptions. Weather minimums for contact flight rules would specify a 1,000-ft. ceiling and 3-mile visibility, and for instrument flight rules a 500-ft. ceiling and 1-mile visibility with a 1,000-ft. ceiling and 3-mile visibility at the alternate airport. Non-scheduled carrier aircraft would be prohibited from flying into known heavy icing conditions, and could fly into medium or light icing conditions only if equipped with suitable de-icing devices.

Airports or landing areas used would have to be of sufficient area so that the taking off or landing run will not require more than 60 percent of the length of the effective area, this length to be

determined by making allowances for obstructions to the flight path with a 15-1 glide in CFR operations and a 40-1 glide in IFR operations.

The proposal defines air carrier as any citizen of the United States who undertakes, directly or indirectly, by a lease or by any other arrangement, to engage in air transportation.

Several specific questions as to the proposals have been circulated with the draft by the CAB. These raise such issues as to whether separate service ratings should be issued for passenger, cargo, and passenger and cargo operations; and separate operations ratings for land and water operations both under CFR day and night and IFR day and night.

A second group asks whether use of single engine equipment should be limited to operation within 500 miles of the operating base when equipped with engines of less than 100 hp, to operation within 25 miles of the operating base at night unless each occupant is supplied with a parachute, or unless the operation is confined to a lighted airway or within 25 miles of a lighted airport, or to operations under CFR unless each occupant is supplied with a parachute?

Some Other Questions

Other questions raised are: Shall the carrier be required to use pilots of the specified experience only when the flight is 500 miles or more from the operating base? Shall pilots operating aircraft more than 500 miles from the operating base be required to meet the first class physical standards prescribed for airline transport pilots every six months? Shall the carrier be required to have a second pilot on an aircraft when the first pilot is required to fly more than 8-hrs. during any consecutive 24-hr. period? Shall the carrier be limited to a particular operating area determined by the general character of the terrain adjacent to the base airport, the type of aircraft, and the navigational aids available? Shall the carrier be required to have its own ground radio communications facilities and to limit its operations within the area where these facilities are available.

The CAB has requested that all comments on the proposed Part 42 be mailed so as to reach Washington not later than Oct. 1, in order that prompt hearings may be held.

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When a Skymaster hits the runway, the tremendous landing energy of this huge plane quickly "disappears". It's not an act of magic, but the shock-absorbing ability of Aerol landing gear that does the trick! . . . The remarkable stamina and efficiency of Aerols, which protect plane, crew, and cargo from landing shock, account for their universal acceptance for major types of aircraft. ♦ ♦ Our products, serving many industrial fields, are mentioned below. Whatever your needs, Cleveland Pneumatic engineers offer you the benefit of over 50 years manufacturing experience.

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with minimum fuel consumption and engine wear! And you'll get long glides for happy landings—with instantaneous change of pitch for quick pickup if you overshoot the field.

This "propeller with a brain"—like no other propeller—is completely self-acting and self-contained. It automatically assumes the proper pitch for peak performance under any and all conditions of flight. You have

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If you fly, or plan to fly, you'll want an Aeromatic Propeller on your plane. Write to your aircraft manufacturer about it today. And if you'd like our little get-acquainted folder containing a diagram of the "brain" in an Aeromatic Propeller, don't hesitate to write to: Aeromatic, 324 Scott Street, Baltimore 3, Md.

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Western's Safety Route—

In 3¼ years, Western Air Lines has flown a total of 6,150 trips over this 2,451-mile ATC route with a perfect safety record. In the period, Western has transported more than 22,012,623 pounds of cargo in Douglas C-47s and Curtiss C-46s, flying a total of 7,050,566 miles.

U. S. Needs 5,000 Peacetime Transports, Says ATC's George

Lt. Gen. Harold L. George, chief of the Air Transport Command, said in a recent newspaper article that some 5000 transport aircraft will be needed for civilian and military needs in peacetime if this country is to have an air transport organization of the magnitude necessary to support its armed forces in any future war.

Of this number, Gen. George envisaged use of 4,500 on the country's civilian transport system and 500 for use of the military in serving outlying military establishments and for training purposes.

Gen. George expressed belief that a civilian transport system requiring the use of 4,500 transport planes is possible if the fare for the average traveler can be brought down to three cents or less per passenger mile and cargo to 30 cents or less per ton mile. Such a reduction would develop a sufficiently large volume of new business to keep these planes operating at required load factors to make the operations profitable, he said.

There are two basic conditions which must be obtained if this goal is to be realized, he stated. They are: "(a) There must be the fullest possible utilization of the airplane's capacity in payload consistent with safety and (b) the air carriers, together with the aircraft manufacturers, must carefully analyze and survey every factor to discover and utilize additional methods of contributing to the economy of air transport operations.

"It must be realized that when we unduly limit the transportation capacity of an airplane, we do not so much penalize the operator of that airplane as we penalize the traveling public. We make it impossible for the airline operator to perform public service at the lowest possible cost. Therefore we deny service to millions of potential passengers."

As another possible means of reducing costs, Gen. George suggests the possible use of production line techniques in jointly operated overhaul shops in bringing about new economies, elimination of duplication in many ground services and use of joint weather forecasting organizations.



Connors



Rose



Stern



Montgomery



Heck



Hughes

Executive

Col. Richard E. Pennig, vice-president-eastern operations of United Air Lines, has been awarded the Bronze Star for duties in line with his position as deputy assistant chief of staff, operations, of the North African Division of the Air Transport Command.

Operations

Ted Johnson, former vice president in charge of operations of Lineas Aereas Mexicanas, has returned to United Air Lines as assistant to O. C. Richardson, western manager of operations at San Francisco.

Capt. Dan Hughes, Jr., has been appointed assistant chief pilot for Braniff Airways, in place of Capt. N. A. Lorenzani who returns to active flying for the company.

Mildred "Tommie" Heck has been named chief hostess for Continental Air Lines replacing Peggy Kallerman, who has resigned to be married.

Richard DeHart Williams, formerly president of Accessories Manufacturing and Engineering Co., has become aeronautical engineer for Western Air Lines.

Paul Davoud, former group captain in the RCAF and prominent in northern flying, has been appointed operations assistant to the vice president of Trans-Canada Air Lines in Winnipeg.

Traffic

Donald H. Snell, veteran of more than 70 fighter-pilot combat missions over Europe as AAF Captain, has recently been named traffic representative in the air mail and air cargo department of Braniff Airways.

George P. Brown, former chief passenger agent at Boston for Northeast Airlines, has been made station manager at Barre-Montpelier, Vt., airport. L. H. Fletcher Bitner, who was DTM for Eastern Canada, has been appointed DTM at N. Y. for Northeast.

Thomas A. Kerr, Detroit DTM for PCA, has been promoted to regional traffic manager, while Thomas R. Butzberger and Lawrence Wharton-Bickley are the new traffic representatives assigned to Cleveland, Oliver F. Stern to Chicago, and Stanley Fisher to Norfolk.

Joseph D. Boylan has been appointed general freight agent for American Airlines.

Maj. John A. Rose has returned to United Air Lines as DTM for Oakland, while S. O. Halberg, who has been acting DTM at Oakland, returns to San Francisco as assistant DTM.



Hill



Bitner



Lederer



Loomis



Parker



Bonnelle

Arthur C. Smith, formerly with American Airlines, has been appointed assistant cargo traffic manager of Western Air Lines, with headquarters in Los Angeles, and Robert Leinster, formerly district manager of passenger service in Salt Lake City, has been promoted to system supervisor of reservations and service.

H. L. Cummings, Northwest Airlines' DTM at Billings, Mont., has been named a member of Montana's newly created Aeronautics Commission for a four year term.

Frank E. Loomis has been named city manager for Eastern Air Lines in Charleston.

John Kissinger and Ashton K. Durrett have been appointed traffic representatives for Mid-Continent Airlines in Minneapolis and Shreveport, respectively.

Miscellaneous

George R. Hill, assistant professor of economics at the University of Denver, has joined Continental Air Lines as director of market and sales research.

J. A. Thomas, who has been transportation manager of TWA's midwest region, has been appointed executive assistant to the airline's transportation-vice president, John A. Collings, while Robert E. Montgomery returns from the ATC as special assistant to T. B. Wilson, chairman of the board.

William J. Elden, assistant general manager of the B-24 modification center operated by Northwest Airlines at St. Paul airport, has been transferred to the company's headquarters in St. Paul to assist E. L. Whyatt, vice-president-treasurer, in establishment and operation of budget procedures.

Dr. L. G. Lederer, medical director of PCA, has been appointed Director of Personnel Administration; Fred W. Parker, former war correspondent, has joined the PCA public relations staff, while seven training supervisors to direct procurement and training of new employees have been appointed: Myron H. Walker, Washington; Violet M. Hamilton, New York; Guess Thompson, Norfolk; Marie McDonnell, Pittsburgh; Dorothy L. Thiess, Cleveland; Sue Brandon, Detroit; and Lucyle Kersell, Chicago.

Allan F. Bonnelle, formerly of the Navy Bureau of Aeronautics, has returned to United Air Lines as assistant to J. A. Herlihy, vice president-operations, at Chicago, and Ray Connors, formerly of PCA has been named district publicity representative in N. Y. E. D. McGlone, display manager of United Air Lines, has resigned and gone into private business in Los Angeles.

D. Franklin Kell, formerly with the CAB in Washington as public counsel, has taken a position with the legal staff of Delta Air Lines.

Examiners Chart Course of Non-Scheduled Lines

Opinions of Henderson, Madden Carry Weight

THE PROBABLE COURSE of future development of what have hitherto been called "non-scheduled" air services, and the type and extent of economic regulation the Civil Aeronautics Board will likely apply to these small air transport ventures were blueprinted by two CAB examiners last fortnight in their report on the Board's Investigation of Non-scheduled Air Services, (Docket 1501).

Although the conclusions and recommendations of Examiners William J. Madden and Curtis C. Henderson are not official expressions of Board policy, their weight in the Board's final policy declaration on non-scheduled operations will be considerable.

Working toward three primary objectives, the Examiners propose cancelling the existing order exempting non-scheduled services from economic regulation. They suggest that this order be superseded by a Board economic regulation designed to:

(a) Provide means whereby the Board and the industry generally may obtain accurate information on air transport operations other than those conducted by the existing certificated carriers.

(b) Preclude the development of unauthorized services in competition with those conducted under existing or future certificates of convenience and necessity.

(c) Allow the greatest possible latitude for the development and growth of the transportation activities of fixed base operators.

Data on Number Lacking

The examiners state that "the outstanding single fact" disclosed by the investigation is that there is no data now available on the number or extent of non-scheduled services in existence. Their proposed economic regulation, printed in the adjoining column, would remedy this lack of information by requiring each fixed base air carrier to register with CAB the name, address and other pertinent details of his business.

With respect to the second objective, the recommendation that fixed-base carriers be prevented from operating between points served by a certificated carrier, should set up adequate safeguards against encroachment by one or more small operators upon traffic developed by a scheduled airline. Information developed in the course of the investigation showed that, in the past, the air transport activities of fixed base operators has constituted only a very small part of their gross business. Although the existing carriers admit they are not worried about this type of competition at present, they pointed out at hearings on the investigation that the fixed base air carrier industry showed every sign of developing to considerable proportions.

The recommended economic regulation, by defining the "casual, occasional and infrequent" trips permitted fixed base carriers between points served by an airline to allow no more than ten such trips per month, wipes out the ambiguity of that phrase. It sets a definite boundary

over which the local operator may not step.

Furthermore, to prevent two or more fixed base carriers from pooling the ten trips allowed to each monthly in an effort to circumvent the intent of the limiting regulation, the Examiners suggest that the fixed base carriers be required to file all intercarrier agreements and operating arrangements for CAB approval.

These restrictions should meet the demands of the airlines for protection against invasion of their traffic by local operators.

Probably the most outstanding recommendation of the examiners is that after adequate protection from encroachment upon the routes certificated by the Board, there shall be absolutely no limits placed upon the amount of service a fixed base operator may offer between any points. "If the business is there," they declare, "and there is no possible harm to the existing competitive system, it would be doing a disservice to the public to preclude the carrier from providing the service with a degree of regularity and from advertising the day and hour of departure and arrival."

The examiners believe, however, that the possibility of a large number of such situations developing is remote and that when they do occur, the carrier who successfully developed the business will be the first to apply to the Board for a permanent certificate to protect himself against other operators who might seek to capitalize on his pioneering.

To permit the greatest latitude of development for the local operator, the examiners suggest that the old and somewhat artificial distinction between "scheduled" and "non-scheduled" services be abandoned and that in its place the term fixed base air carriers be adopted.

The inclusion in the recommended regulation of the requirement that each fixed base carrier possess a valid air carrier operating certificate relates to the proposed Part 42 of the Civil Air Regulations which makes provision for issuing these certificates to non-scheduled operators.

The report will undoubtedly meet with a mixed reception. The amount of economic regulation proposed will probably seem excessive to the fixed base operators themselves, many of whom strongly oppose any kind of economic regulation. On the other hand it may not come up to the expectations of the airlines who suggested somewhat more strict regulations at the time hearings on the investigation were held. It does, however, provide the first set of concrete proposals in an area which has in the past been remarkable for complete uncertainty.

The report suggested that the problem of regulation for contract and cargo air carriers be explored later in a separate hearing, inasmuch as such operations are comparatively undeveloped at present and the existing data does not provide a sufficient basis for any conclusions.

Proposed Classification and Exemption of Fixed-Base Air Carriers

(a) Classification of fixed-base air carriers. There is hereby established, within the meaning of section 416(a) of the Civil Aeronautics Act of 1938, as amended, a classification of air carriers to be designated as

Fixed-Base Air Carriers. Any person who is a citizen of the United States and whose air carrier operations are limited to those hereinafter set forth, and who complies with the terms and conditions of this regulation, or any amendments thereto as may be hereafter promulgated by the Board, shall be deemed to be a Fixed-Base Air Carrier.

(b) Any person desiring to operate as a Fixed-Base Air Carrier shall, prior to the commencement of such operations, file with the Civil Aeronautics Board a statement entitled "Notice of Intent to Operate as a Fixed-Base Air Carrier," which statement shall contain the following information:

(1) The name and address of the carrier. If a corporation, the names of the officers and directors and a statement as to their citizenship and the citizenship of the holders of more than 75 per cent of the voting stock. If an individual or partnership, the names of the owners and their citizenship.

(2) The place, including the name of the airport, at which the carrier will maintain its principal place of business, which shall be referred to as the carrier's "base" of operations. If more than one base of operations is maintained, each shall be considered a separate operation and the provisions of this regulation shall apply as though they were maintained by separate persons.

(3) A brief description of the type of air carrier services which will be offered at such principal place of business.

(c) It shall be a condition to the operation as a fixed-base air carrier that said carrier shall limit the transportation of persons and property for compensation or hire to the transportation of persons or property on trips originating at the principal place of business of the carrier, and to trips originating at other points but which are destined to said principal place of business, and that no trips shall be made between other points, nor between points between which reasonably direct service is available by air carriers operating under certificates of public convenience and necessity issued by the Civil Aeronautics Board, except that such trips may be made on a casual, occasional, and infrequent basis. Trips in excess of 10 in any calendar month between the same pair of points between which reasonably direct service is available by air carriers operating under certificates of public convenience and necessity shall be deemed to exceed a casual, occasional and infrequent basis.

(d) It shall be a further condition to the operation as a Fixed-Base Air Carrier that said carrier shall promptly file with the Board such periodic reports of operations as may from time to time be prescribed.

(e) It shall be a further condition to the operation as a Fixed-Base Air Carrier that there shall at all times be in force and effect an air carrier operating certificate issued in accordance with the provisions of Part 42 of the Civil Air Regulations of the Civil Aeronautics Board.

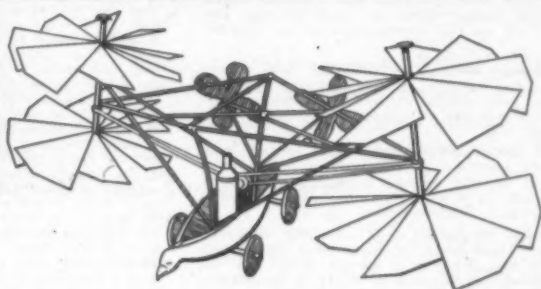
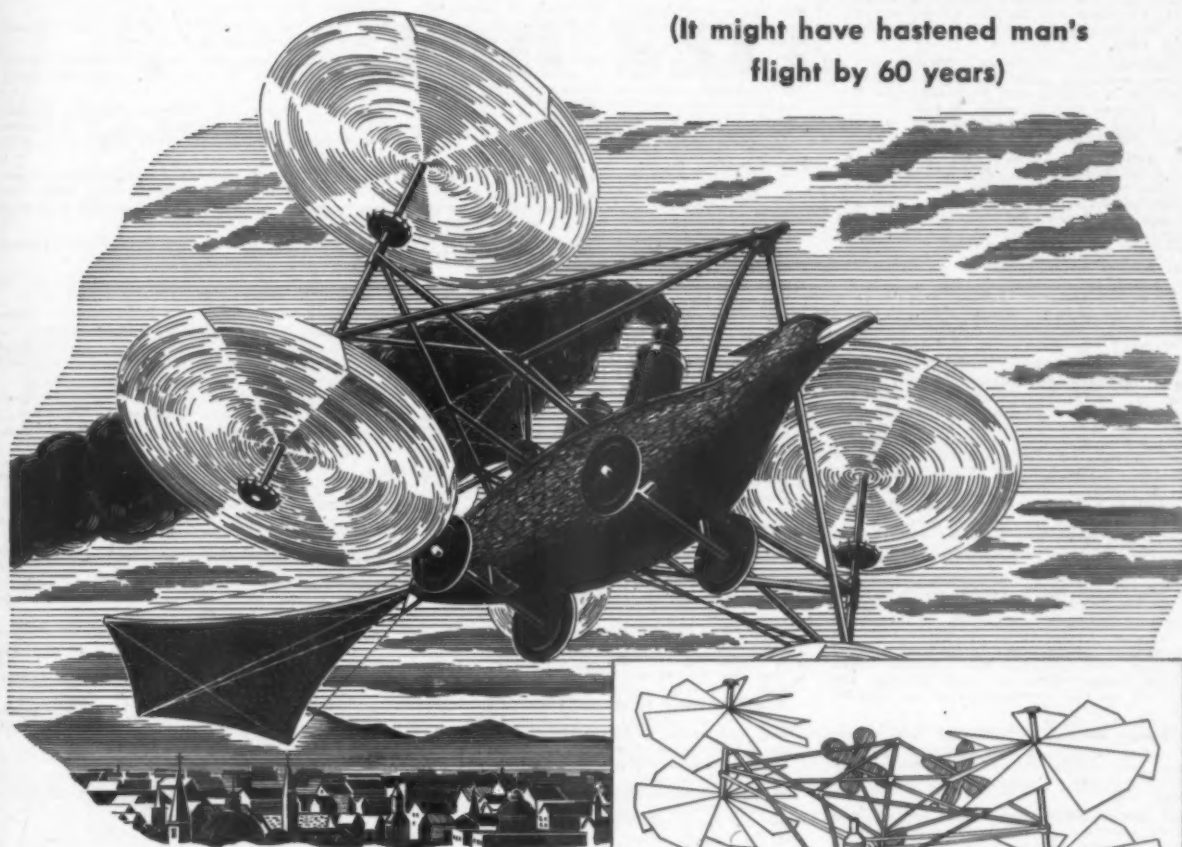
(f) Temporary Exemption of Fixed-Base Air Carriers. Until the Board shall adopt further rules, regulations, or orders, Fixed-Base Air Carriers shall be exempted from the provisions of Title IV of the Civil Aeronautics Act of 1938, as amended, except to the extent as they may be applicable by the terms of this regulation or any amendment thereto, and with the exception of subsection (1) of section 401 and section 412 of said Act.

Hughes Postpones Moving Big Boat

Hughes Aircraft Co., "owing to the sudden turn of events in national affairs," says it is not yet in a position to complete its schedule for the removal of parts of the H-4 flying boat from its Culver City, Calif. plant to the harbor for final assembly.

SIR GEORGE CAYLEY'S STRANGE HELICOPTER

(It might have hastened man's
flight by 60 years)



In 1840, Sir George Cayley designed the machine above with two steam-driven propellers and double-tiered, rotating wings (set at an angle of incidence) on each side of the fuselage. Modern authorities believe that, if constructed, Cayley's design might actually have flown.

COMPARE today's ocean-spanning plane with Cayley's helicopter. Compare your sky trip today with the Wright brothers' flight of 284 yards at Kitty Hawk.

Man's air triumphs are triumphs in a peculiar battle — a battle of *Lift* versus *Drag*. A fight between *Lift* caused by air passing around a wing and *Drag* created by resistance of air to the plane's passage.

Northrop has been in the foreground of the battle for many years. There's the multicellular, internally-braced wing, Northrop pioneered in 1929. The stressed-skin wing built entirely of metal was a Northrop achievement of 1930. Today's high-altitude flying was pioneered by experiments in a Northrop "Gamma" of 1934. Double split dive flaps and retractable ailerons were 1935-1942 contributions.

Further to increase *Lift* and reduce *Drag* is a continuing project at Northrop. We have set our sights at still more efficient propulsion, and at designs like the Northrop Flying Wing, in which nearly all elements will contribute to *Lift*. Northrop Aircraft, Inc., Northrop Field, Hawthorne, California.

Creators of the **Black Widow**

P-61 Night Fighter and the **Flying Wing**



NORTHROP



CAB Proceedings

(A Summary of Applications Filed, Orders Issued, and Future Actions of the Civil Aeronautics Board.)

CAB Applications:

Aerovías Nacionales de Colombia, S. A. (AVIANCA) for a foreign air carrier permit to authorize scheduled or non-scheduled operations between Bogotá, Colombia and Balboa, C. Z., and between Barranquilla, Colombia, and Miami. (Docket 1983).

Alaska Airlines, Inc., Anchorage, Alaska; for a temporary exemption order authorizing mail service between Unalakleet and Anchorage, via McGrath; Akularak and Mountain Village; Haycock and Golovin; and between Koyuk and Golovin. (Docket 1994).

Atlantic Airlines, Inc., c/o J. Raymond Hoover, Metropolitan Bank Building, Washington 5, D. C.; for routes between Newark, N. J. and Washington; Washington and Pittsburgh; Atlantic City and Pittsburgh; Wilmington, Del., and Pittsburgh; and Atlantic City and Trenton, N. J., via various intermediate points. (Docket 1995).

Colonial Airlines for authorization to operate between Boston and Chicago via Albany, Schenectady, Syracuse, Rochester, Buffalo, Niagara Falls, Cleveland and Detroit. (Docket 1989).

Colonial Airlines, for a route between New York and Chicago via Binghamton, Buffalo, Niagara Falls, Erie, Cleveland, and Detroit. (Docket 1990).

Compania Mexicana de Aviación, S. A., for a foreign air carrier permit authorizing scheduled operations carrying mail, passengers and express between Monterrey, Mexico and San Antonio via Nuevo Laredo, Mexico or non-stop; and between Monterrey and Fort Worth/Dallas via Nuevo Laredo or non-stop. (Docket 1992).

Dillon, Lt. Thomas J., (MC) U. S. N. R. and Fellows, William A., for a route between Port Huron, Mich. and Chicago via Flint, Lansing, Jackson, Battle Creek, Kalamazoo, Benton and Harbor, Mich., and South Bend, Michigan City or Gary, Ind. (Docket 1991).

Flying Fish, (James Walter Lassiter, doing business as) 75 Neron Place, New Orleans, La., for a permanent certificate authorizing non-scheduled and charter transportation of fish and fish products and of any type property on return trips over routes between New Orleans, Grand Isle and Morgan City, La., and Chicago and Dallas via various intermediate points. (Docket 1996).

Globe Freight Airlines, Inc., 739 Main Street, Hartford, Conn., for a route between Boston and New Orleans, via various intermediate points. Scheduled transportation of property only is projected. (Docket 1998).

Grenold Collins, Anchorage, Alaska; for a certificate to authorize non-scheduled or charter operations carrying persons, property and mail to all points in Alaska from the terminal point Anchorage. (Docket 1976).

Jim Dodson Air Service, P. O. Box 890, Fairbanks, Alaska; application for approval of the acquisition of the properties of Harold Gilliam and for the transfer of Gilliam's certificate of convenience and necessity to Dodson. (Docket 1987).

Lon Brennan Air Service, Fairbanks, Alaska; for an amendment to its certificate authorizing non-scheduled mail service to points on its present regular route between Fairbanks and Manley Hot Springs via various intermediate points, and to points within its irregular route area. (Docket 1982).

Northern Airways, 203 Lacey Street, Fairbanks, Alaska, for a temporary certificate or temporary exemption order for non-scheduled or charter transportation of persons and property to all points in Alaska from the base Fairbanks. (Docket 1977).

Purdue Aeronautics Corporation, Purdue University Airport, West Lafayette, Ind.; for a route between Evansville and South Bend, Ind., and Chicago, Ill., via Terre Haute and Lafayette, Ind. Scheduled transportation of persons, property and mail in conventional aircraft. (Docket 1993).

Trans-Marine Airlines, Inc., for a certificate to permit scheduled operations carrying mail, passengers and express between New York and Nantucket and between New York and Hyannis, Mass., via New Bedford, Martha's Vineyard and Nantucket. (Docket 1984).

United Air Lines, for amendment of its certificate for Route 1 to remove the condition prohibiting service to Detroit and Cleveland on the same flight. (Docket 2000).

CAB Orders:

3906—Setting rates of mail pay for the operations of Caribbean-Atlantic Airlines, Inc., over Route 59. (Docket 1753).

3907—Authorizing Eastern Air Lines to inaugurate non-stop service between Washington, D. C., and Spartansburg, S. C., on Route 5, effective Aug. 1.

3915—Severing from Pan American's application in Docket 1535 the portion requesting elimination of presently authorized flag stops at Burwash Landing, Yukon Territory, Canada, and Tanacross, Alaska, from its certificate for the Fairbanks-Whitehorse, Y. T., Canada, route. The severed portion assigned Docket No. 1988.

3916—Extending Eastern Air Lines' Route 6 from Columbia, S. C. to Detroit via various intermediate points; extending Delta Air Corp.'s Route 54 from Cincinnati to Chicago and from Knoxville, Tenn. to Charleston, S. C., and Miami, Fla., via various intermediate points; and dismissing or deferring other applications in the Great Lakes-Florida Case. (Docket 570 et al.).

3917—Consolidating with the Gambell-Shungnak-Barrow Mail Service Case (Docket 1498 et al.) an application of Ferguson Airways, Inc., in Docket 1964 for authorization to add mail service to its certificated Alaskan routes.

3918—Denying the motions of Delta Air Corp. and TWA which asked that the application of American Airlines in Docket 1766 be removed from the Southeastern States Case. (Docket 501 et al.).

3919—Rescinding the service suspension order which had authorized United Air Lines temporarily to suspend service between Denver and Cheyenne on Route 17.

3920—Extending the temporary exemption order which permitted Inland Air Lines to provide service between Denver and Cheyenne on Route 28 during the period in which United Air Lines' service on Route 17 was suspended. The extension terminates 30 days after United is able to supply the full volume of service required by the needs of the Denver-Cheyenne traffic.

3921—Authorizing Mid-Continent Airlines to inaugurate service between Tulsa and New Orleans via Fort Smith, Texarkana and Shreveport on Route 26, effective Aug. 10.

3922—Approving interlocking relationships resulting from the holding by John Elliot Slater of positions as Director and Chairman of the Board of American Export Airlines, Inc., and Executive Vice President and Director of American Export Lines, Inc., (steamship). (Docket 1968).

3930—Permitting the Cities of Toledo and Marion, Ohio, to intervene in the Great Lakes Area Case. (Docket 535 et al.).

3931—Authorizing Mid-Continent Airlines to operate non-stop between Tulsa, Okla., and Shreveport, La., on Route 26.

3932—Rescinding Board Order 1758 under which service to Wenatche, Wash., on Northwest Airlines' Route 3 had been temporarily suspended.

3933—Authorizing Alaska Coastal Airlines and Ellis Air Transport to intervene in the Juneau-Ketchikan Local Service Case. (Docket 1972).

3934—Permitting the Oklahoma Aviation Commission to intervene in the Cincinnati-New York-Additional Service Case. (Docket 221 et al.).

3935—Dismissing the application of the Indiana Motor Bus Company in Docket 936 at the applicant's request.

3936—Authorizing Northeast Airlines to intervene in the economic investigation of Trans-Marine Airlines, Inc., and denying a motion of Trans-Marine that Northeast be refused permission to intervene. (Docket 1967).

3937—Authorizing Northwest Airlines to operate non-stop between Billings, Mont., and Spokane, Wash., on Route 3.

3938—Adding New Bern, N. C., as an intermediate point on National Airlines' New York-Miami Route 31. Order attached to Board decision in Docket 1595.

3939—Denying petitions asking reopening of the North Atlantic Case (Docket 855 et al.) filed by PCA, Northeast Airlines, Moore-McCormack Lines, Inc., Pan American Airways, and U. S. Midnight Sun Air Lines, Inc.

3949—Denying a motion of Page Airways for deferment of the Board's economic investigation of Page's air carrier activities. The order also denied oral argument on the motion to defer. (Docket 1996).

3950—Setting a tentative mail pay rate of 45 cents per ton mile for American Airlines, and amending the Board's Show Cause order of Jan. 1, 1945, which instituted the mail rate proceeding. (Docket 1698).

3951—Setting a tentative mail pay rate of 45 cents per ton mile for Eastern Air Lines, and amend-

CAB Calendar:

Sept. 10—Briefs due in West Coast Case. (Docket 250 et al.).

Sept. 15—Briefs due in Southeastern States Case. (Docket 510 et al.).

Sept. 17—Oral argument in Florida Case. (Docket 489 et al.). Postponed from Sept. 5.

Sept. 24—Oral argument, Hawaiian Case. (Docket 851 et al.) 10 a. m. Room 5042, Commerce Building.

Sept. 25—Hearing, Pan American Airways' application to eliminate flagstops on its Fairbanks-Whitehorse Route. (Docket 1988) Fairbanks, Alaska.

Oct. 1—Oral argument in Rocky Mountain Case. (Docket 152 et al.). Postponed from Sept. 10.

Oct. 1—Briefs due, Cincinnati-New York-Additional Service Case. (Docket 221 et al.).

Oct. 1—Hearing, Great Lakes Area Case. (Docket 535 et al.). Tentative.

Oct. 1—Deadline for exchange of exhibits in the Mississippi Valley Case. (Docket 548 et al.).

Oct. 22—Rebuttal exhibits in the Mississippi Valley Case due. (Docket 548 et al.).

Nov. 5—Hearing, Mississippi Valley Case. (Docket 548 et al.) New Orleans, La. Examiner Ferdinand D. Moran.

Dec. 3—Hearing, Kansas City-Memphis-Florida Case. (Docket 1051 et al.). Tentative.

Dec. 3—Hearing, Middle Atlantic States Case. (Docket 674 et al.). Tentative.

ing the Board's Show Cause order of Jan. 1, 1945, which instituted the mail rate proceeding. (Docket 1697).

3952—Setting a tentative mail pay rate of 45 cents per ton mile for Trans-Continental & Western Air, and amending the Board's Show Cause order of Jan. 1, 1945 which instituted the mail rate proceeding. (Docket 1700).

3953—Setting a tentative mail pay rate of 45 cents per ton mile for United Air Lines, and amending the Board's Show Cause order of Jan. 1, 1945 which instituted the mail rate proceeding. (Docket 1699).

3958—Authorizing Chicago and Southern to operate non-stop between Memphis and Houston on Route 53.

3959—Denying Continental Air Lines' petition for reconsideration of the Board's consolidation order in the Mississippi Valley Case. (Docket 548 et al.).

3960—Permitting the State of Texas to intervene in the Florida Case. (Docket 489 et al.).

3961—Permitting the State Aviation Commission of Maryland to intervene in the proceeding in which Baltimore is seeking designation as a trans-Atlantic air route terminal. (Docket 1975).

3962—Authorizing Woodley Airways to intervene in Docket 1309 et al., an Alaskan route proceeding.

3963—Consolidating with Docket 1309 et al. the Alaskan route application of Carl E. Martin, Jr., in Docket 1944.

3964—Denying a petition of Western Air Lines for permission to intervene in Docket 863 et al., an Alaskan certificate case.

3965—Permitting Gilliam Air Lines to intervene in Docket 865 et al., and denying a petition of Western Air Lines to intervene in the same case, a consolidated Alaskan route proceeding.

3966—Dismissing the application of Consolidated Airlines, Inc., in Docket 1367 at the company's request.

3967—Dismissing the applications of Gordons North South Airlines (Docket 1872), and Southern Airways (Docket 1271) at the applicants' requests.

3972—Authorizing American Airlines to resume service to Douglas, Ariz., on Route 4.

Radio Phone Service to Planes

The Federal Communications Commission has announced the start of an experimental program of radio telephone service to motor vehicles, planes and ships. The commission said it would issue a limited number of licenses for experiments in this type of communication. Later the results of the test will be considered at FCC hearings. Meantime, no permanent licenses will be granted.

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CAB Not Likely to Reopen North Atlantic Route Case

Denies Five Petitions Asking Reconsideration

THE North Atlantic Route Case, as far as the Civil Aeronautics Board is concerned, is a closed matter. A Board order issued last fortnight, denied five petitions asking that the case be reopened for rehearing, reargument and reconsideration, apparently closing the last avenue of appeal to CAB.

Several Washington observers expressed the belief that the Board's refusal to reopen the case had been issued after consultation with President Harry S. Truman, which, if correct, indicates that the Government's attitude will be that the route allocations will stand as made.

Two other possibilities for securing a review or modification of the decision by a higher authority may exist through an appeal to a Federal Court or through Congressional action.

The latter followed rapidly after the Board's refusal to reopen the case. Senator George L. Radcliffe (D., Md.), promptly requested the President to order CAB to reconsider its decision permitting domestic carriers to enter the international field and asked the President to give further study to the All American Flag Line proposal. Radcliffe said he also protested the Board's failure to make Baltimore an international route terminal.

Earlier Radcliffe joined 12 other members of the Senate Commerce Committee in a letter to President Truman protesting the certification of domestic airlines for overseas operations. Radcliffe's letter of protest said it was necessary "to give a whole lot more consideration than we have" to cross competition between U. S. domestic and international carriers.

The Board order denying the petitions for reargument made no mention of the fact that the decision had been approved by President Truman before it was issued, and that his discretionary powers may possibly have shaped the final decision. It is also interesting to note that CAB referred twice in the order to the exercise of discretionary powers granted it by law, and that it pointed out that the objections of the dissatisfied parties in the case were directed chiefly to matters of discretion rather than to errors of law.

Regarding Pan American's petition for rehearing, the Board said that "The matters alleged in the petition of Pan American represent primarily opinions at variance with conclusions reached by the Board in the exercise of its sound discretion in the public interest; and they so raise no relevant issue which was not fully presented to the Board on brief and argument before the present case was submitted for decision."

"The contentions in the petition of Pan American Airways, Inc., concerning the supposed injustice of the Board in consigning it to an alleged inferior position among the U. S. air carriers serving

Europe," the Board stated, "relate only to the exercise of the discretion vested in the Board by the (Civil Aeronautics) Act, . . . and, in the absence of any allegations that the Board's findings and conclusions allocating routes to United States air carriers are not supported by substantial evidence of record, do not constitute a valid basis for reargument, rehearing or reconsideration."

Shortly after Pan American's petition for reconsideration had been filed (AMERICAN AVIATION, Aug. 15)—TWA placed before the Board an answer to PAA's assertion that it had been relegated to an inferior position, using Pan American's own traffic estimates to show that the routes assigned to it would receive 28.94 per cent of the total volume of trans-Atlantic travel to be handled by U. S. flag lines.

TWA President Jack Frye charged that Pan American's petition for reconsideration was "another maneuver in its two-year campaign to misinform, confuse and delay America's international air transport program," a maneuver whose real purpose was to keep the international route situation in a turmoil. Pan American, he added, "alone stands to benefit by any vacillation in putting into effect the established national policy."

The Board's order denying petitions of Pan American, PCA, Northeast Airlines, Moore-McCormack Lines, Inc., and U. S. Midnight Sun Air Lines, Inc., concluded action as far as CAB is concerned. The case, it said, is closed.

CAB Schedules Meetings On Revision of Part 04

The Civil Aeronautics Board has scheduled a series of meetings, starting September 10, Commerce Building, Washington, D. C., on the Board's proposed revision of Part 04 of the Civil Air Regulations, Airworthiness Requirements for Transport Airplanes.

Principal subjects which will be brought up for discussion are as follows:

Stalling speed, En route rate of climb with one engine inoperative (for any aircraft), En route rate of climb with two engines inoperative (for aircraft with four or more engines), Full power rate of climb, Performance requirements for cargo aircraft, Any remaining items on performance and flying qualities on which discussion is desired, Design air speeds, Maneuvering tail loads, Ultimate drop test, Ground maneuvering conditions, Pressure cabin loads, Any remaining items on structures and detailed design requirements on which discussion is desired, Powerplant and equipment requirements.

It is likely that approximately the first two days will be consumed in the discussion of the requirements on performance and flying qualities, the third day on structures and detailed design, and the fourth day on power-plant and equipment requirements.

Avianca and CMA Ask Permits to U. S. Cities

Two Latin American subsidiaries of Pan American Airways applied to the Civil Aeronautics Board during the last fortnight for foreign air carrier permits to authorize scheduled air carrier operations between their countries and the United States.

The applications, one by Aerovias Nacionales de Colombia, South America (AVIANCA) and a second by Compania Mexicana de Aviacion, S. A., were filed through the State Department. Of the two lines, only Cia Mex presently holds a permit to operate into this country.

AVIANCA asked for permits covering routes between Bogota, Colombia, and Balboa, Canal Zone, and between Barranquilla, Colombia, and Miami, the latter to be operated non-stop. Its application, which designates John C. Cooper, Pan American Airways' vice president as agent, requests issuance of the U. S. permit on the basis of a reciprocal landing rights agreement between Colombia and the United States which was confirmed by a letter dated Feb. 23, 1929, over the signature of Frank B. Kellogg, then Secretary of State.

A State Department official confirmed that the Kellogg letter was still in force and said that it was recognized by this government as a formal agreement covering reciprocal landing rights. He declined, however, to state whether any action to abrogate the agreement was under contemplation.

The application stated that DC-3s will be used to fly the Bogota-Balboa run, and that Douglas B-23s will be used between Barranquilla and Miami.

The latter plane is a medium twin engine bomber built by Douglas for the Army in 1936 and 1937. Between 30 or 40 of the type were constructed a Douglas representative said. The ship embodies some of the features of the DC-3 although its fuselage is much narrower and its operating costs higher.

AVIANCA's application also disclosed stock ownership figures which show Pan American's present interest to total 64 per cent. The Colombian government owns or controls 15 per cent; Colombian citizens own another 19 per cent; and the remaining 2 per cent is owned by individuals neither citizens of the U. S. or Colombia.

An agreement signed between Pan American and the Colombian government April 13, 1945, gives the Government a ten year option to acquire from Pan American's shares a number sufficient to give the Colombian government or its citizens a total of 60 per cent interest in AVIANCA. Colombian law requires that a majority of the stock of airlines operating in the country be owned or controlled by citizens. AVIANCA's Board of Directors has also authorized the issuance of an additional 100,000 shares of stock to be distributed among Colombian citizens.

Compania Mexicana de Aviacion, S. A., asked for a foreign air carrier permit to authorize scheduled operations carrying mail, passengers and express between Monterrey, Mexico and San Antonio via Nuevo Laredo, Mex., or non-stop, and between Monterrey and Fort Worth/Dallas via Nuevo Laredo or non-stop.

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WALL STREET JOURNAL... "An impressive message... a sound and captivating book."

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Tight Competition Foreshadowed In N. Y.-Cincinnati Case

The Cincinnati-New York-Additional Service Case hearings, completed before Civil Aeronautics Board Examiner R. Heinrich Spang last fortnight, foreshadowed the general tightening of competition among U. S. airlines which may be expected to develop during the post war readjustment period.

Despite the title of the proceeding trunk routes extending as far west as Tulsa and Memphis were involved. Two carriers—Braniff Airways and Chicago and Southern Air Lines—asked entry to New York from the west and southwest. TWA, American, United and PCA, advanced new route and route amendment proposals which pointed to greater competition between New York, Cincinnati and the West.

Maj. Gen. C. R. Smith, American Airlines' Board Chairman, explained his company's application for a New York-Cincinnati-route, to be flown non-stop or via Philadelphia and Pittsburgh, as an improvement over American's present routing via Washington over Routes 23 and 25. Smith was cross-questioned in an attempt to show that such a route would give American an alternate transcontinental through connections at Cincinnati for Nashville, Louisville and the West.

Another American witness, Charles A. Rheinstrom, Vice President-Traffic, predicted that airline fares would be reduced to as little as three cents per mile in the course of a few years.

TWA's proposal to add Cincinnati, Allentown, Bethlehem, Pa., and Wilmington, Del. to Route 2 likewise represented improvement over existing services. E. O. Cocke, TWA's Vice President-Traffic, declared that the injection of a third carrier between Pittsburgh and New York was wholly unnecessary, adding that if TWA were authorized to make the stops it seeks, it could, with PCA, handle the entire traffic needs of the route. Cocke predicted that TWA would be using the Constellation on its Route 2 within a year.

United Air Lines' Harold Crary told the examiner that Cincinnati could be served on United's Chicago-New York route with the addition of only 91 new route miles and would result in new one-plane service from Cincinnati to the West.

PCA's C. Bedell Monro asserted that the trunk line carriers, by subordinating local service to their long-haul business, had neglected the development of local traffic. Granting PCA a New York-Cincinnati route via Philadelphia, Harrisburg, Pittsburgh and Columbus, he said, would place this traffic in the hands of a carrier which has specialized in serving and developing local traffic. PCA's proposed route, Monro admitted, would parallel TWA's Route 2 and some segments of United, American and Eastern. The service, he agreed, would be highly competitive.

H. R. Bolander, Jr., Chicago and Southern's new Vice President-Administrative and General Counsel, said his company's application for a Memphis-New York route was designed to give C & S access to the rich eastern traffic generating areas in order to keep its postwar business at a sufficient level to avoid future subsidy mail rates.

Seasoned Skill...

WITH A MODERN APPLICATION

JET PROPULSION is one of the new, far reaching fields in which Solar research, engineering and manufacturing are being applied. Producing important parts for jet and gas turbine engines falls naturally into Solar's sphere of operations. For during the past fifteen years Solar has been the well recognized leader in the design and construction of airplane exhaust systems—in the production of

heat-resistant products for eliminating hot gases and converting waste heat into a source of useful energy.

After victory, these skills which are now being devoted to production for the aviation industry, will be available to other manufacturers whose problems deal with fabricating heat and corrosion resistant products.




SOLAR
STAINLESS STEEL PRODUCTS



SOLAR AIRCRAFT COMPANY SAN DIEGO 12, CALIF. DES MOINES 5, I.A.

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CAA Unveils Two Stages Of Landing System

Several Other Developments Revealed at Indianapolis

THE FIRST TWO of three stages in a proposed instrument landing system which the Civil Aeronautics Administration believes will permit airports ultimately to handle as many movements per hour under instrument conditions as are now handled in contact weather were demonstrated to the press last fortnight at the first public showing of the CAA's experimental facilities at Weir Cook Municipal Airport, Indianapolis.

Other developments shown to the visiting newsmen included a gun for shooting freshly killed chickens at aircraft windshields to determine their resistance to birds during flight, a transmissometer for accurately measuring visibility conditions, a VHF omni-directional range beacon, two color boundary lights, three types of approach lights, a 3,000,000 candlepower flashing beacon based on the Edgerton stroboscope, and a glide path indicator which shows a flashing light to the incoming pilot.

New Procedure, New Equipment

The new instrument landing system, according to Glen Gilbert, chief of CAA's Air Traffic Control division, involves both a new procedure, and as it becomes available, new equipment. The incoming aircraft contacts the tower and is stacked over a fan marker located from 8-10 miles from the airport in order both to provide a straight in glide and approach path and to keep the holding aircraft out of the way of departing aircraft. An altitude separation of 1,000 ft. is maintained between the holding aircraft which fly a standard holding pattern similar to that used in present instrument procedures, and the aircraft at the bottom of the stack is advised five minutes in advance when he is to leave the holding marker so that he can adjust his holding pattern. Leaving the marker, the bottom aircraft flies straight in at its holding level until it intersects the glide path whereupon it starts descent at 400 ft./min. The glide

path is arranged to intersect the holding marker at 3,500 ft. and an outer marker $4\frac{1}{2}$ miles from the airport at 1,700 ft. Assuming that the lowest holding altitude is 2,500 ft.—this depends somewhat on the altitude of the airport—the pilot reports leaving 2,500 ft. to the tower, whereupon the next lowest ship in the stack drops to 2,500 ft. As this ship reports leaving 3,500 ft., the one above it drops to 3,500 and so forth throughout the stack.

All communications are carried out with static free CHF equipment and are heard by all aircraft in the stack.

Under the first stage of the new system some aircraft will be provided with VHF localizer, range and glide path receivers as well as communications equipment, while others will still rely on their low frequency equipment. In this transition stage Gilbert estimated that it will be possible to land aircraft at 4-min. intervals as compared to 12-15 min. intervals under present procedures.

In the second stage, all aircraft will be equipped with the new CAA developed VHF equipment, and landing headways will be reduced to a 3-min. interval. This new equipment includes a visual indicator for both direction and glide path, and according to CAA officials, permits no variation as against 5 per cent with low frequency equipment.

During the Indianapolis demonstration 11 aircraft were landed at an average headway of three minutes under approximated zero-zero conditions with all VHF equipment, and six aircraft were landed at an average headway of four minutes where four were VHF equipped and two used low frequency. The longest interval between aircraft in the all VHF demonstration was five minutes and the shortest 2 min. 20 sec.

Gilbert stated that the equipment and facilities for putting the first stage in effect were now available and that it could be adopted immediately if the industry will agree on it.

The third stage in the CAA's proposed system, according to Gilbert, would be

Already Obsolete?

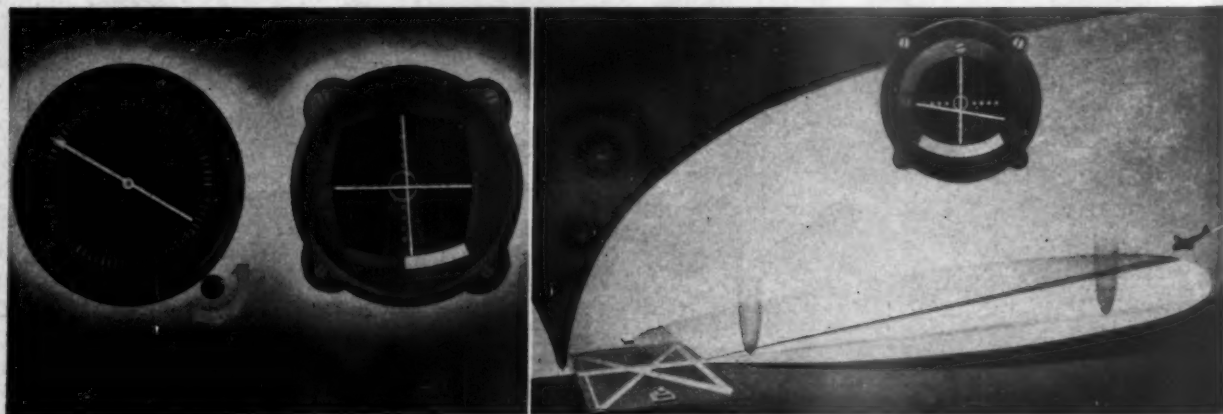
While the Civil Aeronautics Administration has challenged industry to adopt the instrument landing system described on these pages, there is considerable feeling on the part of some airline engineers that while the suggested procedures should have been adopted some time ago, the proposed instruments including both omni-directional ranges and landing localizers are already obsolete and will result in a waste of the tax-payer's money.

These engineers point out that the same job can be done better and cheaper with radar pulse equipment of the IFF type, and estimate that half a million IFF sets which could be adapted to radar beacons will soon be available as surplus. The IFF advocates point out that ground installations would cost less, necessary airborne equipment would weigh less, and that the pilot would actually be better off than with lighted airways and airports under perfect visibility in that the same visual cathode tube indicator used to locate ground markers and glide paths would also tell the pilot the exact location of all other aircraft within a radius of 25-30 miles.

They further note that the CAA is working on an automatic distance indicator based on the pulse principle, and ask why additional airborne and ground equipment should be installed to give direction when it is impossible to determine distance without determining direction.

A full story on the proposed radar beacon system will be presented in a forthcoming issue of AMERICAN AVIATION.

the addition of radar in the control tower to the equipment and procedures of the second stage.



Right: Artist's conception of instrument landing with VHF blind landing equipment. Since the aircraft is lined up with the runway, the vertical needle on the indicator is centered. The horizontal needle is below center, however, as the aircraft is descending at a greater rate than the specified glide path indicated by the shaded diagonal streak. The bullet-like shadows are marker beacons. Left: The same indicator (right) is used with the omni-directional range. At left is the azimuth indicator which is adjusted by the pilot to get compass heading of the beacon. The omni-directional range is not affected by the heading of the aircraft, but by its direction from the range. Two lights are included in the installation to indicate whether the bearing is the true bearing or the reciprocal—that is whether the aircraft is going toward or away from the range beacon.

Engineering Preview

LOOK for two versions of the Martin 202 Mercury to be announced in the near future, one being larger and equipped with more powerful engines than the other. Both will differ somewhat from the version already announced. Mockups of at least one of these new airliners are understood to be close to completion.

Convair's Model 110 is likely to be another early entry in the race for a successor to the DC-3. Company officials recently informed feeder operators that they expect to have a prototype ready by March.

Despite the new types already announced, at least one airline is still looking for a twin-engine 30-passenger transport for domestic service that is designed to meet the needs of low density traffic routes particularly South of the Mason-Dixon line. Models so far announced, it points out, are either too big or too small for its requirements.

Don't be surprised if one of the first DC-6 prototypes is powered by Allison V-1710 engines. Airline interest in these engines has grown considerable since the rumor leaked out that the XB-39—a B-29 equipped with Allison 3420s—showed a five percent increase in speed at the same rated power as the standard Wright-powered Superfortress.

Atomic energy has caught the public fancy as a potential source of aircraft power, but as one leading scientist puts it, we've had dynamite, TNT and nitroglycerine for a good many years, all are far more powerful than gasoline, but as yet no one has used them to power an aircraft or automobile. A far more likely use for atomic energy if means are developed to produce it at reasonable cost is to generate sufficient heat to dispel fog, snow and rain and maintain CAVU conditions at all times over airports and airways.

A recent flight in the nose of a B-17 made us wonder why no commercial designer has as yet adapted the transparent fortress nose to provide a full vision observation compartment on a luxury transport. One engineer to whom we broached the subject said the space would be taken up by the nose gear, but there should be some way of getting around this, and there is always the flying boat as a possibility.

One of the major drawbacks to helicopters, according to an airline engineer, is the problem of power failure immediately after take-off. The take-off, he said, creates a downdraft, and the aircraft must be several hundred feet off the ground before the rotors can be relied upon to support it through gyroplane action.

An hydraulic driven two-stage supercharger operating on a similar principle to the Hydromatic drive on the Oldsmobile is being used on late model Allison 1710 engines. It gives a steady flow of power as compared to the saw-tooth power curve of the geared blower, and like the turbo can be set for automatic barometric control. In combination with a turbine it may produce an even more efficient compound engine than can be obtained with the straight turbo supercharger geared to the crankshaft.

Commercial airlines are looking to the recently announced Westinghouse-Martin Stratovision as a possible solution to one of their most pressing future problems—the menace to navigation offered by numerous FM and television towers. If Stratovision lives up to the expectations, not only will it provide better and cheaper FM and television coverage, but in addition it will completely eliminate the need for such towers.

There are reports that another development based on Stratovision will provide a better answer to the blind landing problem than anything yet proposed. General Arnold may have hinted at it in his recent press conference. Bell Telephone Laboratories are also reported to have some very advanced blind landing equipment in the final stages of development.

Reports that German turbo-jet engines had a life of only 20 hours should not be taken as an indication of inferiority. According to informed sources, the guaranteed life of our own turbo-jet engines is only 10 hours. It is interesting to note further that while all early reports stressed the fact that the jets ran on kerosene, present indications are that high octane gasoline will be used in future models. Wing tanks on the P-80 recently displayed at Washington National Airport were marked "Suitable for Aromatics."

Considerable confusion is now arising as to radar with many people assuming that all radar devices include the scanning scope of search equipment. In general the Army has used the word radar to include all electronic equipment utilizing the pulse principle as against the continuous wave, and some so-called radar devices don't even use a reflected wave, but instead receive their signal from another transmitter. It is the latter which appear to hold the most promise for commercial navigational use.

SYDNEY CARTER.

5 Major Accidents Caused By Reverse Rigging, Report

Reporting that five major accidents including one involving a C-54 transport were caused by reverse rigging in the last eight months, the Office of Flying Safety, Army Air Forces, has made up the following schedule for checking controls which it recommends posting in a prominent place wherever aircraft are overhauled:

AILERONS: Stick to right raises right aileron. Stick to left raises left aileron.

ELEVATORS: Stick forward lowers elevator. Stick to rear raises elevator.

RUDDER: Pressing right panel moves rudder to right. Pressing left pedal moves rudder to left.

TRIM TABS: Elevator—nose down—tab up.

Ailerons—right wing down—right aileron tab-down or left up. Left wing down—right aileron tab up or left down.

Rudder—nose right (right rudder) tab left; nose left (left rudder) tab right.

The OFS further recommends that all checks should be made by two men, one in the cockpit moving the controls, and the other on the ground checking the result. It points out that when a pilot finds the tabs have been reversed, it is often too late to do anything about it.

Evans Tie-Down Equipment Used in AA Cargo Experiment

Evans loading and tie-down equipment, used throughout the war by both the Air Transport Command and the Naval Air Transport Service, was also used to secure a load of five civilian jeeps recently transported from Detroit to California by



Rope and Hook Equipment is Used to Lash the Jeeps to the Floor.

American Airlines in its experimental Consolidated C-39 air cargo operation.

Both Skyloader rope and hook equipment and special rod and beam fixtures were used to hold the jeeps in place during the flight. Upon arrival, only eight minutes were required to unfasten the cargo and leave it ready for off-loading.

Part 61.3516 of CAR Amended; Concerns Props

Part 61.3516 of the Civil Air Regulations has been amended to permit a new record to be used in the case of propellers for which there is no previous operating history, if the hub is rebuilt by the manufacturer or by a certificated repair station having the proper rating, and new blades or blades with a complete operating history are installed therein. The new record must be signed by the repair

AA Reveals Stand on Future Use of Navigational Aids

'Eventual Desirability of Pulse Techniques' Cited

ADVANCED radar and similar techniques are very promising, but give us good runway lights, approach lights; localizer, glide path and two non-directional homing stations in line with all landing directions to be expected under instrument low approaches—and do this at all of our airports—and we will show a landing and take-off record, as well as a schedule regularity record, that will be hard to beat with any of the so-called advanced techniques."

This is the position recently taken by American Airlines in regard to navigational facilities for the immediate future. The American stand, which was recently circulated to all operations managers, commercial and transatlantic pilots, flight superintendents and department heads, points out, however, that the company believes in the "eventual desirability of pulse techniques" for doing more things easily with less confusion in the cockpit than can be done with present methods and equipment.

Turning to present equipment, the report states that AA engineers believe that high intensity and adequate runway lights can and very probably will bridge the gap between the final instrument low approach and the actual contact with the ground, and recommends that immediate attempts should be made to improve lights as a means of extending the visual period of flight during poor visibility conditions. It further expresses a belief that approach lights can be devised that will be visible in both night and daytime under zero zero conditions with, for instance, driving snow for a distance of at least one quarter mile from the end of the runway, and from an altitude of at least 300 ft.

'Must' for Low Approaches

The localizer is selected as the most reliable and accurate means now available for tracking the runway direction. The glide path indicator is listed as a valuable and necessary aid to the altimeter, and the report states that although it can not be relied upon as the sole means of maintaining ground clearance except in an emergency, it can be considered a must for consistently precise low approaches. At the option of the operator, it says, a radio altimeter will have to be considered as a necessary adjunct to a localizer and glide path.

On the controversial question of ADF non-directional homing stations, American lists the following four reasons why homing stations on the runway path are emphatically needed:

1. They make it possible for the relatively unskilled pilot to approach, get on and stay on the localizer path without undue mental and physical effort. Further, as skill and experience on the two course visual range develops, the paths that it defines can be narrowed and made more precise with the aid of ADF homing stations in defining the proper heading to be flown.

2. The homing stations provide a reliable and positive proof of position regardless of whether or not the track is being properly flown. 75 mc fan markers are also considered desirable as an added proof of position on the runway track.

3. When at least two homing stations are used at 3½-5 mile intervals with the inner station at the end of the runway or not more than a mile away, they provide a close-in holding pattern from which aircraft can be led to the runway at frequent and precisely spaced intervals with continuous and positive altitude separation.

4. They provide flexibility of navigation with extreme ease.

To Use Common Frequency

On the question of multiplicity of frequencies which has often been raised in connection with homing stations, American says it believes this can be solved by the use of a common frequency at any one field for all inner markers, and likewise for all outer markers, the ones in use at any time to be the only ones turned on. It further recommends as an aid to ADF navigation that a program be adopted which would result in all commercial broadcasting stations providing a

continuous identification signal above the audible range for use by all pilots equipped with reception devices.

With the above three basic devices constituting a framework for a satisfactory low approach system, American Airlines believes that in a period of time equal only to that required to get these well known devices actually installed, straight-in approaches will be made 100 percent of the time. It further points out that for operation of aircraft with a relatively low cross-wind component, it is not sufficient simply to designate one direction of landing on each field as the instrument runway, but that all likely directions for landings under instrument conditions must be provided with instrumentation for a straight-in instrument approach. Regardless of the success in accomplishing the installation of a sufficient number of glide path and localizer transmitters, all of the expected instrument landing directions must be defined by homing stations and runway and approach lights.

With the above equipment, the report concludes, supported by allied devices such as the radio altimeter, 75 mc fan marker, and possibly in extremely high traffic density terminals, an available search radar, American Airlines and all other operators can and will improve their potential landing and take-off safety by a considerable amount, and bring their schedule regularity up by leaps and bounds.

Detachable Aerial Containers Studied; Designed for Pick-Up and Drop-Off

A plan for the use of detachable aerial containers in the shipment of air freight, which was first advocated in 1928 by Robert M. Thomson, a Miami attorney, is now being studied by Star Container Associates, New York, which is laying plans for its initiation in the near future.

Thomson is director of research of the new organization which is headed by Col. John B. Rose, a New York business counsel. R. B. Shoemaker, New Rochelle, N. Y., and E. A. Burrows, Washington, D. C., will serve as consulting engineers.

Under the Thomson plan, all air freight would be handled by specially designed aircraft in special detachable containers which could be picked up and dropped off as a unit, thus cutting down on loading and handling time. The containers would be of varying size, ranging up to 6x6x12 ft., and would be easily transportable by truck from the airport to stores or other consignees.

At the same time, the increase in weight resulting from the container would be offset by the use of specially designed aircraft in which all floors are omitted and part of the basic structure of the aircraft is used to support the containers.

To offer still further flexibility, all Thomson's detachable container aircraft designs incorporate provisions for pick-up and drop-off operations during flight so that service may be provided to airportless communities, and the time formerly required for landing and take-off eliminated even when suitable airports are available.

Many advantages of the container plan are stressed by Thomson. First and foremost, of course, is the reduction in man hours required through the elimination of

cargo handling both at the terminal and during flight. Under the container system, the shipment would be packed by the shipper—various size containers being available for various size shipments—and unpacked by the consignee in a similar manner to the railroad practice of shunting box cars around the country. A still further advantage resulting from this—particularly in the case of breakables—would be that the shipper could pack the goods himself, and the airlines would be relieved of much of the responsibility for damage in transit.

If present expectations for the aerial shipment of quick frozen foods materializes, the container system would eliminate the need for refrigerated aircraft since the container itself could be insulated and pre-cooled. This would eliminate the need for special one-purpose aircraft, and at the same time provide protection for the consignment to and from the airport as well as en route.

Means Revenue in Off-Hours

Thomson further visualizes the container system as a means of providing a revenue paying load during the off passenger hours between midnight and seven in the morning. If a detachable container plan is used, he says, with all aircraft in the system so constructed as to accommodate standardized container units, a passenger ship arriving at a terminal at midnight could pick up a container load of mail, express or cargo and continue operating through the night until ready to resume passenger operations in the morning. This, he claims, should produce considerable increased revenue for the airline, and lessen the indirect cost per mile.

A SALUTE TO WICHITA'S WAR WORKERS



THE Service men and women on the far-flung battlefronts can feel justly proud of the wholehearted support given to them throughout the war by the people of Wichita. All Wichita people have fully supported the war by personal sacrifices and by both direct and indirect assistance, but this tribute is especially directed to those who work in all the large and small plants which together and in cooperation have turned out such vast quantities of war material.

Wichita's war workers represent a true cross section of Kansas people. They have performed miracles of production. Starting with little or no industrial experience, they have applied eagerness to serve and devotion to their jobs as a successful substitute for experience, and have produced a quantity of war production that has not been equalled on a per capita basis by the people of any other city or locality. The Wichita record of 18 Army-Navy "E" awards for excellence and 4 Maritime "M" awards for merit attests the outstanding quality of their workmanship.

They have come from near and far to lend their willing hands, strong backs, and active minds to the job of producing what our Government asked us all to deliver to our fighting forces. They closed up their businesses, left their farms, and changed their mode of living in order to help get the job done. A recent survey shows that a clear majority of these folks are in war work because of their desire to directly and personally contribute to victory.

The women have rendered invaluable service and have made a magnificent record of efficiency in tasks that they never dreamed they ever would attempt. The physically handicapped people have proved that their determination and courage more than offset their physical disabilities. The old folks who came from retirement have demonstrated that they too can do a full-sized job.

Generosity in Red Cross donations, both in money and blood, has characterized these fine people. They have invested many tens of millions of dollars in war bonds.

We feel that these folks are truly representative of Kansas people and that their achievements are derived from the strength and the support of all Kansas people. They have demonstrated that Kansans* not only can do whatever they want to do, but also can do it quickly and well. With this lesson of the war before them, who can doubt the future greatness of Kansas and of Wichita?

We respectfully salute the war workers for the job that they have done and the job that they will continue to do in war production and the peace production that is to follow.

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*Of course all these folks are Kansans now, although many of them came here from other states, to help do the job.

Beech Aircraft

CORPORATION

BEECHCRAFTS ARE DOING THEIR PART  WICHITA, KANSAS, U. S. A.

U. S. Production Claimed to Have Won War

Industry Financed Own Pre-War Research Work

WITH victory over Japan an accomplished thing, the U. S. aircraft industry could look back on a production record, which, in conjunction with other heavy industry, could well claim to have won World War II.

Prior to the war, the aircraft industry did its own pioneering and research work, aided only by a few experimental orders from the armed forces and by the relatively small commercial and private orders from the airlines and private flying.

When Hitler began the ill-starred conquest of Europe, England, France and the Dutch East Indies placed orders with U. S. manufacturers for those planes and engines which had been released for export, and the aircraft industry began an expansion which was to make it the largest and most important of wartime industries.

At the beginning of the national emergency, the aircraft industry produced 2.3 million pounds of military airframes in July, 1940. This production rose steadily through 1941-43 to a peak of 102.4 million pounds in May, 1944—45 times that of the first emergency month.

This growth in airframe output (in millions of pounds) is shown in the following chart:

Airframe Weight of Military Aircraft Produced (Including Spares) by Months, 1940-1945
(Millions of pounds)

Month	1940	1941	1942	1943	1944	1945
Jan.	1.6	3.9	14.4	35.9	90.0	81.2
Feb.	1.5	4.4	15.8	41.4	94.6	83.3
Mar.	1.4	4.6	18.8	47.3	101.4	86.6
Apr.	1.5	6.2	18.6	52.7	96.4	....
May	2.2	5.8	21.6	57.3	102.4	....
June	2.4	6.1	23.1	62.1	97.8	....
July	2.3	5.8	25.5	63.7	93.9	....
Aug.	2.0	7.8	27.3	69.1	93.9	....
Sept.	1.7	8.7	30.1	71.1	90.0	....
Oct.	2.2	10.3	28.1	76.1	87.8	....
Nov.	2.4	9.3	31.4	80.5	81.7	....
Dec.	3.4	12.8	37.9	85.7	80.8	....
Total	24.0	85.7	292.6	742.9	1,110.7	....

Measured in terms of annual production, the weight of military airframes jumped from 24.6 million pounds in 1940 to 85.7 million pounds in 1941, 3.3 times that of the first emergency year. However, with the outbreak of actual hostilities, 1942 production increased by a slightly greater percentage, reaching the total of 292.6 million pounds. Constantly spurred by incessant demands from the Services for more and better airplanes, production continued to mount sharply, reaching a total of 742.9 million pounds in 1943.

Despite the contracts and cancellations which already reached the industry in 1944, American aircraft production reached its peak in 1944 with 1,111 million pounds—a figure which is likely to stand for some time to come. The 1944 output represented an increase of 4400 per cent over the 1940 production, when the aircraft industry first began to feel the effects of World War II.

In terms of dollar value of product, the total aviation industry (including airframes, engines, propellers, spare parts, as well as airborne equipment, experimental, research and development), re-

corded a steady and consistent growth from the second half of 1940, when its products were valued at \$342 million to a peak of \$16,745 million in 1944. The table presented below shows the breakdown by years from 1940 through 1944, by airframes, engines, propellers and spare parts:

Value of Military Airframes, Engines, Propellers, and Spare Parts Produced and of Total Aircraft Production, July 1, 1940-Dec. 31, 1944
(Millions of dollars—at August, 1943, unit costs)

Year	Airframes	Engines	Propellers	Airplane spare parts	Total	aircraft
1940 (second half)	\$ 144	\$ 111	\$ 21	\$ 58	\$ 334	\$ 342
1941	820	462	80	296	1,658	1,708
1942	2,769	1,434	255	1,278	5,736	6,071
1943	6,690	2,453	447	2,781	12,377	12,970
1944	9,231	3,432	531	3,145	16,339	16,745

¹ Including aircraft other than airplanes, airborne equipment, experimental, research, and development.

In terms of units, a total of 300,317 military aircraft were produced from January 1, 1940 to the day Japan accepted the Potsdam terms, August 14, 1945. From December 7, 1941, a total of 274,941 military aircraft were turned out by American factories. The all-time record was established in 1944, when a total of 96,369 military airplanes were made. This figure well could have been higher, if necessary, but contract cutbacks had al-

ated in Canada, or a total of 86 by 1943. By then, the plant construction program had practically been completed, with minor exceptions.

The total floor space utilized by prime aircraft, engine and propeller contractors grew from 9,455 thousand square feet as of January 1, 1939 to 15,115 thousand

square feet at the beginning of 1940 (reflecting foreign orders), then almost doubled to 25,456 thousand square feet at the start of 1941. This was small, however, in comparison with the war-time growth; floor space as of September 1, 1941 was 44,171 thousand square feet, and continued to expand steadily until a peak of 175,005 thousand square feet of floor space was being utilized in December, 1943. A breakdown of the floor space utilized by airplane, glider, engine and propeller facilities (in terms of thousands of square feet) from January 1, 1939 through December, 1944 is shown in the table at bottom of this column.

The aviation manufacturing industry, including aircraft, engines, parts and accessories, had an estimated gross value of facilities of \$114 million in 1939. Wartime expansion (from July 1940 through December 1944) has added an estimated \$3,792 million to the estimated value of these facilities, bringing the total to about \$3,906 million. Where, in 1939, aviation manufacturing facilities represented a mere 0.3 per cent of all our manufacturing facilities, the wartime growth was 15.8 per cent of all manufacturing expansion, so the aircraft industry at the end of last year is estimated to represent 6.1 per cent of the value of all manufacturing facilities, then appraised at approximately \$63,646 million.

Vitality necessary to the production of aircraft demanded by the Services was the manpower—and the woman power—necessary to utilize these vastly expanded production facilities. A nation-wide recruiting program for all types of workers was begun by the aircraft industry.

The industry had a total working force of only 48,638 persons in 1939; the success of the industry's recruiting program was

Total Floor Space on Aircraft, Engine and Propeller Facilities (Prime Contractors), 1939-1944
(Thousands of square feet)

Date	Airplane	Glider	Engine	Propeller	Total
Jan. 1, 1939	7,497	....	1,726	250	9,455
Jan. 1, 1940	9,606	....	3,018	492	13,115
Jan. 1, 1941	17,943	....	6,463	1,050	25,456
Sept. 1, 1941	31,786	....	10,651	1,734	44,171
Jan., 1943	77,536	2,486	31,329	5,240	117,091
Dec., 1943	110,423	3,558	54,189	6,835	175,005
Dec., 1944	102,951	1,694	54,388	7,968	167,391

GOVERNMENT SURPLUS PROPERTY

Primary Trainers—Gliders—Sailplanes—Barrage Balloons

FOR SALE

*Through Reconstruction
Finance Corporation*

PRIMARY TRAINING PLANES*

Boeing PT-17; Fairchild PT-19 and PT-23. Single engine . . .
2-seated . . . Tandem . . . open cockpit. Cruise at over 90 m. p. h.
CAA type-certificated. Prices are low—\$875 to \$2,400—to allow
for repairs necessary to meet CAA requirements. For sale at all
RFC Sales Centers.

\$875 to \$2,400

GLIDERS AND SAILPLANES*

(CAA Type-Certificated)

Waco CG-3A, 9-place cargo and passenger gliders. New. *Only 22 of these left.* Price \$875. For sale at RFC Sales Center, Americus, Ga.
Taylorcraft TG-6 2-place gliders. Price \$350. Convertible to power. 65 h. p. engines for conversion available from RFC for \$150 to \$485. Gliders for sale at following RFC Sales Centers: Albuquerque, N. Mex.; Oklahoma City, Okla.; Ft. Worth, Texas; Phoenix, Ariz.; and Ontario, Calif.

Pratt-Read TG-32 sailplanes. Two-place side-by-side. New. Price \$500. For sale at RFC Sales Center, Americus, Ga.

*These models are type certificated but individual planes must be repaired to meet Civil Aeronautics Administration airworthiness requirements for civilian flight.

BARRAGE BALLOONS

Constructed of light weight 2-ply neoprene-coated fabric. Weighs 8.4 oz. per sq. yd. Suggested for use where light weight weather-proof material is required. Two sizes available; one contains 260 sq. yds. of fabric; the other contains 781 sq. yds. 250 for sale. For sale as units. Price \$1.00 per sq. yd. Address inquiries to Aircraft Division, RFC, 1625 K Street, N. W. Washington, D. C.

SALES CENTERS

(Cities listed alphabetically by States)

LOCATION	AIRPORT
Birmingham, Alabama	Municipal
Decatur, Alabama	Municipal
Phoenix, Arizona	Thunderbird II
Tucson, Arizona	Ryan
Wickenburg, Arizona	Echeverria
Pine Bluff, Arkansas	Grider
West Helena, Arkansas	Thompson-Robbins
Blythe, California	Gary
Del Palos, California	Eagle
Fresno, California	Chandler Field
Hemet, California	Ryan
Ontario, California	Cal-Aero
San Jose, California	San Jose
Denver, Colorado	Hayden
Miami, Florida	Chapman
St. Petersburg, Florida	Ludwig-Sky Harbor
Americus, Georgia	Souther
Augusta, Georgia	Bush
Douglas, Georgia	Municipal
Lansing, Illinois	Ford-Lansing
Indianapolis, Indiana	Sky Harbor
Davenport, Iowa	Cran
Wichita, Kansas	Municipal
Baton Rouge, Louisiana	E. Linton Rouge Parais
North Grafton, Massachusetts	North Grafton
Lansing, Michigan	Capital City
Minneapolis, Minnesota	Victory
Clarksdale, Mississippi	Fletcher
Madison, Mississippi	Augustine
Cape Girardeau, Missouri	Harrie
Kansas City, Missouri	Municipal
Robertson, Missouri	Municipal
Sikeston, Missouri	Harvey Park
Helena, Montana	Municipal
Omaha, Nebraska	Municipal
Reno, Nevada	Reno
Readington, New Jersey	Solberg-Hunterton
Albuquerque, New Mexico	Army Air Field
Albany, New York	Albany
Rochester, New York	Municipal
White Plains, New York	Westchester County
Charlotte, North Carolina	Cannon
Akron, Ohio	Municipal
Cincinnati, Ohio	Lunken
El Reno, Oklahoma	Mustang
Muskogee, Oklahoma	Hat Box
Oklahoma City, Oklahoma	Cimarron
Ponca City, Oklahoma	Municipal
Stillwater, Oklahoma	Municipal
Portland, Oregon	Portland-Troutdale
Pittsburgh, Pennsylvania	Beets
Bennettsville, South Carolina	Palmer
Camden, South Carolina	Woodward
Sioux Falls, South Dakota	Sioux
Jackson, Tennessee	McKellar
Union City, Tennessee	Embry-Riddle
Ballinger, Texas	Bruce
Corpus Christi, Texas	Corpus Christi
Cuero, Texas	Municipal
Fort Stockton, Texas	Cibola
Fort Worth, Texas	Hicks
Houston, Texas	Municipal
Lamesa, Texas	Lamesa
San Antonio, Texas	Municipal
Stamford, Texas	Arling
Vernon, Texas	Victory
Salt Lake City, Utah	Municipal No. 1
Alexandria, Virginia	Eyba Valley
Olympia, Washington	Army Air Field
Morgantown, West Virginia	Municipal



RECONSTRUCTION FINANCE CORPORATION

A DISPOSAL AGENCY DESIGNATED BY THE SURPLUS PROPERTY BOARD

MANUFACTURING

reflected in the total of 2,102,000 employed at the peak in November 1943, which figure represented 12.4 per cent of the total manufacturing employees of the nation.

A tribute should be paid to the women who responded to the industry's call for help. At one representative time—after the expansion program had been completed—36.9 per cent of all workers in prime aircraft contracting plants were women (July, 1944), and at its peak, in November, 1943, more than 486,000 women were employed by the aircraft manufacturing industry.

As efficiency increased and production "bugs" on new models were ironed out, costs dropped sharply, and unit prices of military aircraft were reduced, with substantial resultant savings to taxpayers. For example, the cost of one four-engine bomber dropped from \$15.18 per pound to \$4.82 per pound—a total saving of more than \$500,000 per airplane produced. In the case of a single-engine fighter, the cost dropped from \$7.41 per pound to \$5.37 per pound, which resulted in a price reduction of more than \$20,000 per unit.

With the costs of both labor and material high, the plants operating on a three-shift and overtime basis, and all contracts strictly subject to renegotiation, the aircraft industry, as was expected, made surprisingly small profits, in relation to the tremendous volume of product. In fact, the aircraft industry has recorded the lowest percentage of profits of any wartime industry, despite its foremost position in size and value of product. In 1944, net profits represented only 1.2 per cent of sales—but during this year, the industry returned 71.7 per cent of its earnings to the Federal Government in the form of taxes.

Beall, V. P. of Boeing, Heads Technical Group

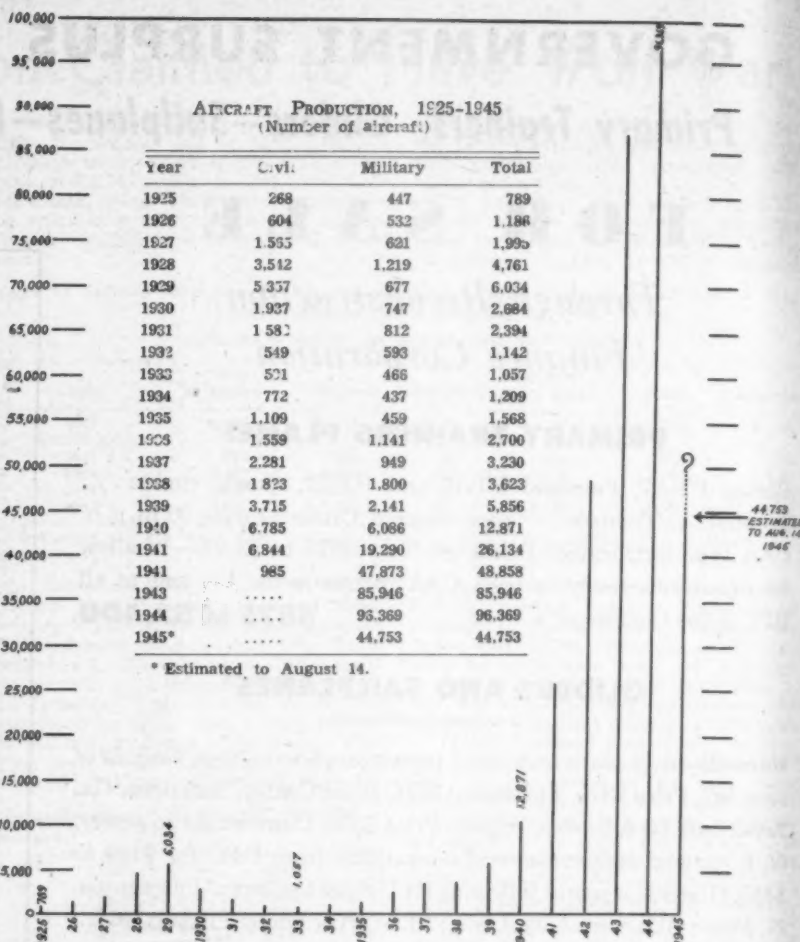
Wellwood E. Beall, vice president-engineering, Boeing Aircraft Co., was elected chairman of the newly created executive board of the Aircraft Technical Committee, Aircraft Industries Association, at its recent annual meeting in Denver. Beall and the five-man Board will function as a steering committee in allocating the work of the various technical committees of the association.



Beall

DC-6 Mockup on Display At Douglas-Santa Monica

Visibility for passengers in the DC-6 will be much greater than in the DC-3, it is revealed in a mockup of the plane recently completed at the Santa Monica plant of Douglas Aircraft Co. The DC-6's windows are 16 inches high and 18 inches wide as compared to the 12 by 16 inch windows of the current DC-3. Cabin arrangement of the mockup features increased seating space per passenger simplification in the reclining apparatus and stowage space for traveling bags under each seat.



Here's List of AAF Plants Scheduled For Disposal Shortly Through RFC

THE WAR DEPARTMENT on Aug. 23 released a list of 252 surplus government-owned plants, shortly to be available for disposal through the Reconstruction Finance Corp., of which 32 were producing for the Army Air Forces.

The list included AAF plants of:

*Aerona Aircraft Corp., (Adjacent to company's privately owned plant), Middletown, O.; *Bellanca Aircraft Corp., (Plant located in middle of company's privately owned plant), New Castle, Del.; *Briggs Manufacturing Company (Outer Drive Plant), Detroit, Mich.; *China Aircraft Corp., San Francisco; Consolidated Vultee Aircraft Corp., Downey, Calif.; *Fairchild Engine & Airplane Corp. (Ranger Aircraft Division), Jamaica, N. Y.; *Ford Motor Company (River Rouge Aircraft Engine Plant), Dearborn, Mich.; *General Alloys Co., Boston; *General Railway Signal Co., Rochester, N. Y.; *Haskelite Manufacturing Co., Grand Rapids, Mich.; *Howard Foundry Company, Inc., Chicago; *Huck Manufacturing Co., Detroit; *Industrial Fabricators Co., Burbank, Calif.; Kinner Motors, Inc., Glendale, Calif.; *Maryland Sanitary Manufacturing Co., Baltimore, Md.; McDonnell Aircraft Corporation (Including Modification Center No. 15), Memphis; *McDonnell Aircraft Corp. (Airport Plant), Memphis; *Models, Inc. (Adjacent to company's privately owned plant), North Bergen, N. J.; Modification Center No. 6, Evansville, Ind.; Modification Center No. 7,

Niagara Falls; Modification Center No. 18, Kansas City; *Moser-Jewel Co., Perth Amboy, N. J.; *Murray Corporation of America, Scranton, Pa.; *Northwestern Aeronautical Corp., St. Paul, Minn.; *Peeco Products Co., Cleveland; *Republic Aviation Corp., Evansville, Ind.; *Reynolds Metals Co. (Fabricating Plant), Louisville; *Reynolds Metals Co. (Formerly Mengel, Inc.), Louisville; *Schweizer Aircraft Corp., Big Flats, N. Y.; *Serval, Inc. (Adjacent to company's privately owned plant), Evansville, Ind.; *Union Ford and Hoe Co., Rome, N. Y.; *Waco Aircraft Co., Troy, O.

* DFC Plants.

** Alongside company's privately owned plant.

NWLB Says No Severance Pay Plan for Convair Division

The National War Labor Board has declined to order a severance pay plan placed into effect at Consolidated Vultee Aircraft Corp., Stinson Division, Grand Rapids, Mich., because it would not be "fair and equitable" under the circumstances prevailing in the aircraft industry. The majority opinion stated that if a severance pay plan is adopted "we think it should be done either by voluntary agreement of the parties or by appropriate legislation."

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W. A. PATTERSON, President, UNITED AIR LINES

"THIS year, as United Air Lines marks the 25th Anniversary of its coast-to-coast airway, we are, simultaneously with our wartime job, giving special attention to the nation's postwar air transportation needs so that we will be ready for prompt transition from war-time operations to peace-time activities. These studies are based upon day by day develop-

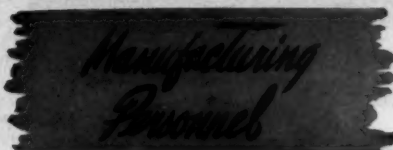
ments in a multitude of fields affecting our business. For this reason, my associates and I refer daily to The Wall Street Journal as a news source containing much exclusive information of vital importance to our planning."

W. A. Patterson



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Whitney Maving Grundman

Herbert Grundman has joined the research and development organization of Specialties, Inc., in the capacity of quality control engineer.

Richard Peterson, formerly resident War Service manager at the Des Moines plant of Solar Aircraft Co., has been promoted to assistant division manager, with headquarters at San Diego, while William Quade, who had formerly been the manager of Solar's Dayton office, replaces Peterson at Des Moines.

Ernest G. Whitney, former assistant executive engineer of the Cleveland laboratory of the National Advisory Committee for Aeronautics, has been named assistant chief engineer of the Ranger Aircraft Engines Division of the Fairchild Engine and Airplane Corp.

Frederick F. Robinson of New York, president of National Aviation Corp., has been elected to the board of directors of Bell Aircraft Corp.

Norman R. Kevers, formerly president of Electronic Laboratories, Inc., Indianapolis, has been elected chairman of the board, with William W. Garstang, former vice-president and general manager, being made president, and Walter E. Peck, Paul H. Frye, and Harry C. May made vice-presidents. Thomas D. Scheidler and William J. Lockhead had previously been elected treasurer and secretary respectively.

R. C. Maving has been appointed general superintendent of Plant No. 6 of Globe Aircraft Corp. to supervise production for the C-82.

Henry F. Daver has been elected president of the Brown Instrument Co., a wholly-owned subsidiary of Minneapolis-Honeywell Regulator Co., as successor to Charles S. Sweett who will supervise the expanded sales activities of Honeywell and its subsidiaries. Engineering activities of the parent company will be directed by W. J. McGoldrick who has been vice-president in charge of aeronautical engineering, while Russel H. Whempner has been appointed sales manager of the Aeronautical Division.

Robert E. Renner, former budget officer and assistant to the president of Bell Aircraft Corp., has been appointed assistant treasurer and general controller of Aeron Manufacturing Corp.

Alan G. Day, former head of the Wright Field office of Hamilton Standard Propellers Division, has transferred to Sikorsky Aircraft Division, United Aircraft Corp., as service manager, while Walter F. Chappel took over his old post at Dayton.

C. W. Felker was appointed factory superintendent of the Vultee Field division of Consolidated Vultee, succeeding Wes Magnuson, who has been transferred to the Fort Worth division. W. F. Hindes takes over Felker's former position as assistant superintendent of assembly.



Renner Whempner Day

Victory Brings End Of Four AWPC's

The end of the war has brought to a successful conclusion the activities of the four Aircraft War Production Councils. The East Coast Council stopped its work with the cessation of activities, followed shortly by the West Coast Council and the Central Council, and now it has been announced that the National Aircraft Council will complete its liquidation by November 1.

Organized solely to speed the manufacture of military aircraft, the Councils proved effective agencies through which aggressive pre-war rivals pooled their production know-how, machines, tools, materials, manpower and resources, which included trade secrets and patents, to build the world's largest and most effective air force. In this war period, the aircraft manufacturing industry grew in size from fortieth to first place among the nation's industries.

In the prewar period, the aircraft industry, with its small volume, was one of the most competitive in the nation. Companies competed with each other with relatively similar designs for relatively small Army and Navy orders. It was only natural that new designs, methods



Palmer Vandenberg Peters

and production procedures were closely guarded secrets. With the outbreak of war, the common competitor was enemy aircraft production. To speed output, and to produce better airplanes, the West Coast aircraft manufacturers formed the West Coast Aircraft War Production Council at Los Angeles in the critical days of April, 1942.

This coordinating group functioned so efficiently that it was followed by the formation of the East Coast Aircraft War Production Council a few months later, followed by the merging, in April, 1943 of the two groups into the National Aircraft War Production Council. This organization rendered invaluable service in eliminating bottlenecks, improving methods and processes and accelerating production of all types of aircraft. It is reported that over one million engineering manhours had been saved by March 1944 through this pooling of research data and production techniques. The West Coast Council alone exchanged more than 9,000 technical reports.

The National Aircraft War Production Council, with headquarters in Washington, did an effective job of coordinating the work of the regional groups, and of smoothing out relations with the Government agencies and the Armed Services directly concerned with aircraft production. Vast savings resulted from the pooling of research activities and the exchange of testing and tooling experiences through-

out the country. Committee, panel and special projects techniques were used by the experts from all aircraft companies to break the production bottlenecks, to eliminate costly delays, and to increase production efficiency with resultant reductions in manhours and airframe costs.

Basic committees of the regional councils included engineering, accounting, industrial and public relations. Special panels covered such matters as child care, materials conservation, housing, transportation, safety, inspection and plant protection. The councils also sponsored many projects with local authorities at the community level.

At the end of the war, Richard C. Palmer was manager of the National Council, Clyde Vandenberg headed the East Coast, and William F. Peters the West Coast Council.

WPB's Aircraft Division Commended on Disbanding

The War Production Board's Aircraft Division was officially dissolved on August 18 with a "record of which both the division and the industry should feel justly proud . . . an outstanding example of government and industry co-operation," WPB Chairman J. A. Krug announced. At the same time the order administered by the division were revoked as part of the general lifting of all but a handful of WPB controls.

The Aircraft Division was responsible for assisting the airlines in order that these essential carriers might be maintained in efficient operating condition and assisted in expanding their facilities to accommodate the greatly increased wartime loads, WPB stated. In addition it "expedited the orderly conversion of the aircraft manufacturing industry."

Henry P. Nelson, director of the Division, who has been on loan from International Harvester Company, has not announced his future plans other than that he expects to take a vacation before returning to private industry. Morton H. Wilner, deputy director, plans to open a Washington law office early in September, while Leo S. Panek, the assistant director, will return to Lansing, Mich. Jean Dubuque, head of the production branch, has been appointed assistant sales manager in charge of foreign sales for Beech Aircraft Corp. and E. A. Bolster, head of the planning branch, has returned to the Bureau of the Budget.

Gliders Which Might Make Lightplanes Offered by RFC

Surplus military gliders which can be converted into light airplanes have been offered for sale at six RFC sales centers. Sales were started August 15 at Hicks Field, Ft. Worth, Texas, and later at Army Air Field, Albuquerque; Thunderbird II Field, Phoenix, Ariz.; Cimarron Field, Oklahoma City; Olympia Army Field, Olympia, Washington; Cal-Aeron Airport, Ontario, Calif., and Bush Field, Augusta, Ga.

RFC has 149 Taylorcraft TG6 gliders which can be converted by replacing the nose with an engine mount, adding an engine and making other alterations for which CAA will grant approval.

TWA Net for First Half of '45 Hits Peak

\$1,699,163 is Reported; Other Statements Listed

TRANSCONTINENTAL & WESTERN
AIR reported that both gross earnings and net income reached new peaks in the first six months of 1945. Gross revenues were \$17,218,608, up 64.1% over the corresponding figure of \$10,490,785 reported for the first half of 1944. The 1945 income reflects accrual of air mail revenues at 60c per ton-mile, with no provision made for the CAB show-cause order, amended August 13, to reduce this rate to 45c per ton-mile. Net income before taxes for the first six months of this year was \$3,201,595, compared with net before taxes of \$1,150,224 earned in the corresponding period of last year. After taxes, and non-recurring charges, net income hit a new high at \$1,699,163 for the first half, equal to \$1.73 per share on 984,084 shares of outstanding capital stock. This compares with net income of \$666,253, equal to 68c per share on 974,403 shares of capital stock then outstanding. If the air-mail rate per ton-mile should be reduced to 45c, and made retroactive to Jan. 1, 1945, earnings for the first-half of the year would be reduced to \$1,033,606, or \$1.05 per share.

Improved control over operating costs was reflected in the reduction of operating costs per revenue mile from \$1.02 in the first six months of 1944 to 91.8c for the first six months of this year. Total operating expenses increased 46.9% over the corresponding period of 1944, to \$13,267,935.

Eastern Air Lines

Eastern Air Lines, Inc., reports net income of \$856,782, or \$1.44 per share for the first six months of 1945. This represents a gain of 95% over the like period of 1944, when net income was \$438,413, or 73c per share. Operating revenues for the first half of this year increased 53% to \$12,323,042, despite a reduction of 6½% (on the average) in passenger fares. Operating expenses increased \$2,311,307, but expense per revenue mile were reduced 16% to 66c. Revenue miles flown in the first half of the year were up 65% to 12,223,545. Revenue passenger miles flown increased 79%, to 205,692,202. Current assets of \$23,969,603, of which cash or government bonds amounted to \$20,500,990 were reported as of June 30, against current liabilities of \$8,384,140.

American Airlines

American Airlines, Inc. reported net profit, after taxes, of \$2,311,066, equivalent to \$1.79 per share of capital stock for the first six months of 1945. This compares with the net income of \$2,163,035, or \$1.68 per share on the common stock now outstanding for the corresponding period of 1944. Operations for the first half of this year were at an all-time high level. Revenue passenger miles flown were up 48% to 353,867,589. Revenue miles flown were 21,892,122 in comparison with the 14,770,242 flown in the first half of 1944. The company also flew 9,472,145 airplane miles in overseas service under contract with the U. S. Army. The company points out in con-

nection with its first half earnings statement, that it may be subject to excess profits taxes for 1945, which, if it should occur, would decrease its net profit for this period by about \$1,065,000 and thereby reduce per share earnings to approximately 97c.

Delta Air Lines

For the fiscal year ended June 30 last, Delta Air Lines reported an operating profit of \$1,506,195 and a net income of \$538,693 after taxes. This was equal to \$1.35 per share of outstanding stock. Operating revenues reached a new high at \$5,156,282, compared with \$3,233,326 in the previous fiscal year. In the past fiscal year, Delta completed 95.6% of scheduled operations and averaged 18.2 passengers per mile flown, a load factor of 81.6%. Each plane was flown an average of 14.02 hours or 1,903 miles per day.

Continental Air Lines

Continental Air Lines has reported a gross profit of \$617,736 for the fiscal year ended June 30, 1945. After taxes, reserves and other deductions, this was equal to a net income of \$348,230, or \$1.30 per share on 271,756 shares of outstanding capital stock. This is an increase of 69% over the 1944 fiscal year net of \$199,410, equal to 77c per share on 256,256 shares of stock then outstanding. The higher profit for the 1945 fiscal year was achieved despite a substantial reduction in air-mail pay, which dropped from 38.16c per revenue mile in the 1944 fiscal year to 21.2c per revenue mile on the average during the 1945 fiscal year. Revenue miles flown increased from 1,800,000 in the 1944 fiscal year to 3,014,000 in the last fiscal year.

Western-Inland

Western Air Lines, together with its subsidiary, Inland Air Lines, reports an increase of 120% in operating revenue for the first half of this year to \$3,355,762 from the \$1,526,900 reported for the first half of 1944. Operating expenses dropped nearly 15c per revenue mile, increasing net operating profits by about 9c per revenue mile. This, combined with an increase of about 131% in revenue miles flown, permitted the company to report a consolidated net profit of \$266,350 for the first six months of this year, equal to per share earnings of 65c on the capital stock.

Brewster's Annual Report

Brewster Aeronautical Corp. reports consolidated profit (including subsidiaries) of \$616,958 for the year ended December 31, after charges and provisions for federal income and excess profits taxes and for contingencies, but before special tax credits. After special tax credits, net, of \$406,800, a net income of \$1,223,758 was transferred to earned surplus. Net sales for the 1944 year were reported at \$73,086,957. This compares with net sales of \$139,884,712 reported for the year 1943, when operations resulted in a net loss of \$607,176, after including special tax credits of \$523,000. No provisions were made in either the 1943 or 1944 income accounts for possible renegotiation refunds, so that the figures reported are subject to such adjustments. The balance sheet as of December 31, 1944 showed current assets stated at \$23,121,919, against which current liabilities were reported at \$20,524,606. The capital stock is outstanding at 566,561 shares.

United Aircraft Shows Increase

Shipments of United Aircraft Corp. for the quarter ended June 30, 1945, amounted to \$166,384,798. Net income was \$3,410,189, which is equivalent to \$1.16 per share of common stock on 2,656,701 shares outstanding, after provision for dividends to that date on preferred stock. Shipments for the six months ended June 30, amounted to \$331,900,931 and net income was \$6,937,950, or \$2.37 per share of common stock, also after provision for dividends on preferred stock. The foregoing results are subject to renegotiation.

Republic's 6-Months' Report

Republic Aviation Corp.'s earnings for the six months ended June 30, are estimated at \$5,600,000. This figure is before renegotiation and provision for Federal income and excess profits taxes. The net income, after provision for taxes and \$435,000 reserve for contingencies, amounted to \$1,550,000, equal to \$1.57 each on the 982,406 shares of common stock outstanding. The net income for the first half of 1944 was \$1,806,176 or \$1.94 a share, after provision for taxes and \$889,701 reserve for contingencies. For the half year period of 1944, before taxes and contingencies, earnings were \$10,602,950. Whereas sales a year ago were \$219,797,334, this year they were about \$148,000,000, nearly all under cost-plus-a-fixed-fee contracts. As of June 30, 1945, unfilled orders approximated \$290,000,000. Backlog of unfilled orders approximated \$405,000,000 as of Jan. 1, 1945.

Fairchild V Credit Amended

Fairchild Engine and Airplane Corp. announces that its regulation V credit agreement with Bankers Trust Company, Chase National Bank, Bank of the Manhattan Company, and Grace National Bank of New York has been amended to provide for \$17,500,000 at 2½% interest on borrowings until Nov. 15, 1947. The new amendment, effective Aug. 1, modifies the credit agreement with these four local banks dated Nov. 1, 1944, which provided for \$25,000,000 at 3% interest on borrowings until Nov. 15, 1946. Webb Wilson, Fairchild treasurer, said the \$7,500,000 reduction in borrowing limit under the V-loan credit, as well as an equal reduction in the amount of Fairchild's total indebtedness permitted by the terms of its V-loan credit agreement, reflects lower anticipated financial requirements and the successful offering last May of 90,000 shares of Fairchild Engine and Airplane Corporation's \$2.50 cumulative preferred stock (without par value—convertible prior to May 1, 1955) by a group of 19 underwriters headed by Smith, Barney and Co. As of July 31, Wilson said, 8,436 shares of this preferred stock had been converted into common stock, with the result that there were 81,574 shares of such preferred stock and 1,160,699 shares of common stock of Fairchild Engine and Airplane Corp. outstanding on that date.

Columbia Buys Engine Firm

Columbia Aircraft Products, Inc., Somerville, N. J., has purchased all of the outstanding stock of Palmer Brothers, Inc., Cos Cob, Conn., for cash and the new company will be operated as a subsidiary, according to reports in financial circles.

GM Negotiating for War Plant

General Motors is understood to be negotiating with the RFO for the lease of the War Department surplus plant in North Kansas City used during the war for assembly purposes by North American Aviation, Inc.

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SPB Disposal Regulations Based on Four Principles

A spokesman for the Surplus Property Board said that the regulations under which the Government will dispose of its vast chain of war plants are being designed to make more jobs, spread industry throughout the country, and discourage monopolies.

SPB disposal regulations will be based on four principles:

1. The disposal value of a war plant will be fixed on its worth in its peacetime role rather than on its war use or even its cost to the government.

2. The potential buyer guaranteeing the highest number of jobs will get the plant—all other things being equal.

3. Local, independent capital will get preference in purchasing a war plant and the Government will extend credit up to 90% of property's cost to help local interests buy a factory.

4. In fixing prices of war plants, a money value will be put on job potentials.

Meantime, Reconstruction Finance Corporation announced that fifty-two war plants had been declared surplus through July 31, and are being offered for sale or lease. Included in the list of 52 surplus plants and facilities are:

Coleman Flying School, Ltd., cost \$455,700; Darr Aero Tech., Albany, Ga., \$669,700; Embury-Riddle Company, Arcadia, Fla., \$1,184,300; Lodwick Aviation Military Academy, Avon Park, Fla., \$606,800; Willow Run Community Center, Ypsilanti, Mich., \$227,900; Anderson Air Activities, McBride, Mo., \$1,140,800.

State Airlines Has New Method for Financing

State Airlines of Charlotte, N. C., applicant for local service routes radiating out of the Piedmont area, has presented to the CAB a new method for financing its proposed operations, according to H. K. Gilbert, Jr., president.

Gilbert said the company's 52 stockholders were financially able to provide the necessary capital and that Hallgarten & Co., New York investment bankers, would underwrite and supply whatever total funds were required for a permanent or temporary certificate.

Gilbert said this financial setup was important since it would mean that State would not resort to any equipment trust financing at the outset.

Not Necessary to Declare Small Lots as Surpluses

The Surplus Property Board has ruled that owning agencies may sell lots of aircraft property with a value under \$100 without declaring them surplus and turning them over to Reconstruction Finance Corp. However RFC may require any aircraft property to be declared surplus when sales by owning agencies interfere with its marketing of similar property.

The ruling, found in Order 1 to SPB Regulation 9 dealing with Contractor Inventory and Disposals by Owning Agencies, states: "Limitation on authority of owning agencies to sell small lots of surplus property peculiar to aircraft; Section 8309.16 (b) provides that, except as otherwise stated by the Board, small lots of property (as defined therein) should be disposed of by owning agencies. It is recognized in section 8309.16 (a) that what constitutes a small lot for such purposes will vary according to the nature of property and it is provided that the Board may from time to time issue orders thereunder setting forth standards to be applied and procedures to be followed in connection with small lots of various classes of property. The Board has determined that such an order is required in the case of property peculiar to aircraft. Accordingly, it is hereby ordered, that:

1. The authority of owning agencies to sell small lots of property peculiar to aircraft at the best price obtainable pursuant to section 8309.16 shall be limited to cases in which the cost (estimated, if not known) of any item or group of identical items available at any one location at any one time does not exceed \$100.

2. Whenever in the opinion of the Reconstruction Finance Corporation the disposition of such small lots of any given type of property peculiar to aircraft interferes with the orderly marketing of such type of property by it, the Reconstruction Finance Corp. may direct the owning agencies to cease sales of such property and to declare all such property to it as surplus. Effective August 17."

Incorporations

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